



**PERCEPTIONS OF U.S. NAVY MEDICAL RESERVISTS
RECALLED FOR OPERATION DESERT STORM**

**DTIC
ELECTE
AUG 10 1993**
S C D

D. S. Nice

S. Hilton

Report No. 92-35

93-18336



63 8 9

Approved for public release: distribution unlimited. **004**

NAVAL HEALTH RESEARCH CENTER
P.O. BOX 85122
SAN DIEGO, CALIFORNIA 92186-5122

NAVAL MEDICAL RESEARCH AND DEVELOPMENT COMMAND
BETHESDA, MARYLAND



PERCEPTIONS OF U.S. NAVY MEDICAL RESERVISTS RECALLED FOR OPERATION DESERT STORM

D. Stephen Nice, Ph.D., and Susan Hilton, M.A.

Health Sciences and Epidemiology Department,
Naval Health Research Center,
San Diego, CA 92186-5122

Accession For		
NTIS	CRA&I	☒
DTIC	TAB	☒
Announced		☐
Distribution		
Availability Codes		
Dist	Avail and/or Special	
A-1		

DTIC QUALITY INSPECTED 3

Abstract

The recall of reserve forces in support of Operations Desert Shield/Storm resulted in the activation of approximately 9,700 Navy medical reservists. The purpose of this study was to identify major issues associated with the recall and assignment experiences. A demographically representative sample of 3,804 medical reservists (39%) responded to a survey between June and September, 1991. Results indicated that in-processing and out-processing were conducted in a timely and professional manner. Reservists felt well prepared to meet the challenges of their recall assignments; however, they did not strongly endorse the Reserve training program. As a general trend across operationally-oriented issues, such as command staffing and equipment, habitability and administration, and leadership and assignment satisfaction, responses were moderately positive. Reservists assigned to CONUS hospitals rated items more positively than those assigned to Marine support, and officers were more positive than Hospital Corpsmen. Medical and Dental Corps officers experienced the greatest financial hardships. Child care/dependent care requirements of most reservists with children appeared to be reasonably well met. Results are presented as a descriptive heuristic for policy considerations.

Report No. 92-35 was supported by the Naval Medical Research and Development Command, Department of the Navy, under Work Unit Number 65152N M0106.001-6001. The views expressed in this report are those of the authors and do not reflect the official policy or position of the Department of the Navy, Department of Defense, or the U.S. Government. Approved for public release, distribution unlimited. The assistance of LCDR Tracy Malone in survey development is gratefully acknowledged. The authors also acknowledge the contributions of CDR J. T. Coyne in the review of this report and of Kimi Cohen and Greg Shorts in data management assistance.

The Total Force concept, which fully integrated the Reserve components into a national defense strategy and placed increased reliance on their augmentation for the rapid and substantial expansion of the active forces in time of conflict, was incorporated as part of our national policy by congressional action during the final years of the Vietnam War.^{1,2} It was not until the Iraqi invasion of Kuwait, however, nearly 20 years later, that this concept would be fully tested. The recall of the reserve forces in support of Operation Desert Shield was authorized by the President on 22 August 1990, and set in motion a process which would activate approximately 9,700 U.S. Navy medical reservists over the succeeding six months. The Naval Selected Reserve medical assets included enlisted Hospital Corpsmen and Dental Technicians, as well as Medical, Dental, Nurse, and Medical Service Corps officers.

During Operations Desert Shield and Desert Storm, medical personnel comprised approximately 50 percent of the naval reservists who were recalled.³ The majority of these personnel (71%) were assigned to approximately 18 medical treatment facilities within the continental United States to sustain the patient care capability as the active duty members were transferred to assignments in the Gulf War. Those Navy medical reservists who deployed to the Gulf War provided staffing for two self-contained 500-bed fleet hospitals, augmented the hospital ships USNS Mercy (T-AH 19) and USNS Comfort (T-AH 20), and supported the Fleet Marine Force.

As the recall was initiated, the Surgeon General of the U.S. Navy recognized the opportunity to evaluate the recall process, and requested a study of all Navy medical reservists recalled in support of Operations Desert Shield/Storm. The purpose of this study was to identify major issues associated with the recall process and assignment experience.

METHODS

Sample

A total of 3,804 medical reservists (39%) responded to the survey between June and September, 1991. As shown in Table 1, this sample of recalled medical reservists was very representative of the population (N=9,747). However, the response rate from Hospital Corpsmen, particularly the paygrades of E3 and E4, was somewhat low. Unlike the Navy population, approximately 40 percent of the medical reservists were women and about 30 percent were officers. The majority of the sample was married (64%), and nearly two-thirds of the reservists' spouses were employed full-time. About one-fourth of the spouses were affiliated with the military. Approximately 3 percent of the men and 10 percent of the women were single parents, and 70 percent of the married personnel had children under the age of 18 living at home. The mean age of the sample was 35 years, with a range from 18 to 65 years. The sample consisted primarily of Hospital Corpsmen (56%), Nurse Corps officers (24%), and Medical Corps officers (12%). The majority of the reservists (65%) had prior active duty experience. Within the three officer corps, approximately 81 percent of the men and 64 percent of the women reported previous active duty experience. Among Hospital Corpsmen, 69 percent of the men and 45 percent of the women reported previous active duty experience. About one-half of the corpsmen (52%) and most of the officers (89%) used skills in their civilian occupations which were similar to the skills required by their Navy Officer Billet Classification (NOBC) or Navy Enlisted Classification (NEC).

The majority of the reservists in this sample was recalled during August, 1990 (24%), and during January (34%) and February (23%) of 1991. The Reserve units of the respondents represented all 50 states, Washington, D.C., and Puerto Rico. The greatest numbers of reservists who responded to the survey resided in California (18%), Virginia (7%), and Florida (7%). While many reservists were deployed to the Persian Gulf area, most (71%) served in the continental United States (CONUS), typically augmenting hospital or clinic positions vacated by active duty personnel who were deployed to the Gulf.

For those reservists who were recalled to CONUS facilities, approximately one-third were assigned within 60 miles of their home. Overall, the

median distance to the recall assignment within CONUS was 225 miles. The time between personal notification and deadline for in-processing ranged from less than eight hours to 90 days, with a median of five days. Approximately 26 percent of the respondents indicated that the notification time was not adequate. A large proportion of these respondents (46%) for whom the notification time was not adequate were processed during the first recall in August, 1990. The median notification time-span for those respondents who indicated that the time was inadequate was two days. During in-processing, 38 percent of the respondents were aware of the delay/exemption policy, and 6 percent requested a delay or exemption.

Procedure

Based largely on input from the Bureau of Medicine and Surgery, research personnel at the Naval Health Research Center (NHRC) constructed an 82-item survey to assess demographic information, experiences regarding in-processing, out-processing, and recall assignment, and attitudes and perceptions regarding recall issues. The quantitative assessment of attitudes and perceptions was measured in part by four, five-point, Likert-type rating scales. One set of 12 items assessed satisfaction, using the verbal anchors "very dissatisfied" (1) and "very satisfied" (5). A second set of 13 items assessed agreement, using the verbal anchors "strongly disagree" (1) and "strongly agree" (5). A third set of five items assessed hardship, using anchors "no hardship" (1) and "severe hardship" (5). A final set of four items assessed the quality of preparedness for recall duties, using "not at all well" (1) and "very well" (5). A copy of the questionnaire is provided in Appendix A.

In June, 1991, the survey was mailed to all medical reservists who were recalled during Operations Desert Shield/Storm. Privacy Act issues were addressed in a cover letter from the Navy Surgeon General, and participation was voluntary. The anonymous surveys were returned to NHRC in pre-addressed envelopes through September, 1991. All quantitative data on the surveys were double-entered by two data-entry clerks into separate computer files which were then matched and verified in accordance with normal NHRC data quality assurance procedures.

Table 1
Demographic Summary of Survey Respondents (N=3,804)

Population* and Sample Data:

Corps/Rate			Rank/Paygrade					
			Officer		Enlisted			
			Pop.	Sample	Pop.	Sample	Pop.	Sample
	%	%		%	%		%	%
Medical Corps	8	12	Total	28	42	Total	72	58
Dental Corps	1	1	WO	<1	<1	E-1	<1	<1
Medical Service Corps	4	6	O-1	1	1	E-2	3	1
Nurse Corps	16	24	O-2	5	5	E-3	18	9
Hospital Corpsman	68	56	O-3	33	33	E-4	28	22
Dental Technician	3	1	O-4	30	29	E-5	28	33
	100	100	O-5	18	19	E-6	14	21
			O-6	13	13	E-7	5	9
				100	100	E-8	2	3
						E-9	<1	1
							100	100

Age			Sex		
	Pop.	Sample		Pop.	Sample
	%	%		%	%
Mean	33.4	35.5	Male	60	54
Std. Dev.	8.8	8.9	Female	40	46
Range	18-66	18-65			

Sample Data Only:

Marital Status by Children Living at Home

	Men				Women			
	Total %	Child(ren) 1-12 yrs only	Child(ren) 1-12 &/or 13-17 yrs	No Children	Total %	Child(ren) 1-12 yrs only	Child(ren) 1-12 &/or 13-17 yrs	No Children
Married	70	32%	19%	19%	59	28%	10%	21%
Not Married	30	2%	1%	27%	41	7%	3%	31%

Spouse's Employment

	%	n
Spouse Not Employed	20	478
Full-time/Active Duty	66	1,624
Part-time	14	350
	100	2,452

Spouse's Military

	%	n
Spouse Not in Military	75	1,846
Active Duty Military	15	360
Reserve, Not Recalled	7	177
Reserve, Recalled	3	69
	100	2,452

Race

	%	n
White	84	3,191
Black	7	257
Hispanic	5	174
Filipino/Pac. Is.	2	88
Asian	1	44
Other	1	34
	100	3,788

Civilian Skills Similar to NOBC/NEC (n=3,724)

Officer	Enlisted
89%	52%

Miscellaneous

	%	n
Prior Active Duty	65	2,448
Self Employed	13	480

* Population Data provided by Naval Reserve Personnel Center, New Orleans, LA (N=9,747)

RESULTS

The first section of the results of this study describes the overall recall process. The second section describes the analytic procedures used to consolidate and interpret the items which were presented in a five-point rating scale format. The next section presents the associations between professional corps and aspects of the recall process. The influence of duty assignment is addressed in the fourth section, and gender-related issues are presented in the final section.

Recall Process

As shown in Figure 1, the majority of reservists who were recalled were assigned to a CONUS facility. While 62 percent of all medical reservists were assigned to a hospital or clinic in CONUS, approximately 17 percent were assigned to a fleet hospital in the Gulf. Based on the computation of expected values of each assignment by each corps, Medical Corps and Nurse Corps officers were placed more frequently in hospital/clinic or fleet hospital assignments and Hospital Corpsmen were more frequently assigned with the Fleet Marine Force. Subsequent to the initial recall, only about 12 percent of the sample indicated that their orders were modified.

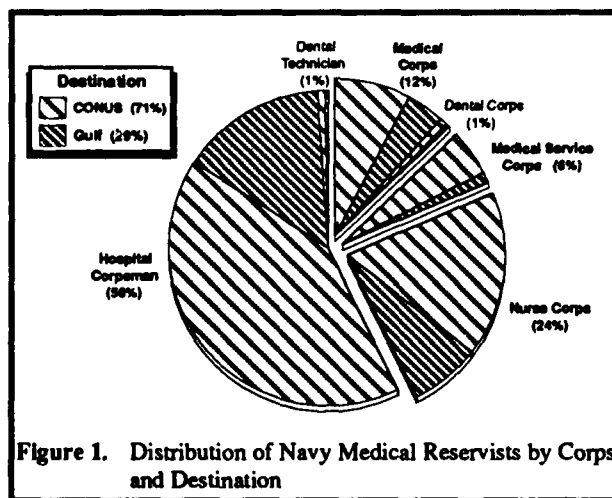


Figure 1. Distribution of Navy Medical Reservists by Corps and Destination

An analysis of the association between Reserve program affiliation and recall assignment demonstrated a high degree of concordance. Approximately 90 percent of the reservists in the Surface Medical Program (Program 32) were assigned to a hospital, clinic, or hospital ship, and 77 percent of the personnel in the Fleet Marine Force

Program (Program 9) were assigned to the Fleet Marine Force. In addition, 64 percent of the reservists in the Fleet Hospital Program (Program 46) were assigned to a fleet hospital, and 31 percent were assigned to a hospital or clinic.

Scale Development

A large portion of this questionnaire consisted of specific items which assessed the recall experience. Most of these items were presented in a five-point rating scale format, and the mean response values on each of these items are presented for each corps in Appendix B. While many of the results of this survey were straightforward, others required the use of analytic procedures to combine similar items, reduce complexity, and enhance interpretability. Factor analytic and scaling procedures were used to derive a set of themes or dimensions underlying the quantitative items. Specifically, the 34 quantitative items were entered into a principal components factor analysis to derive a set of underlying dimensions. Factor loadings of .40 or greater were used to develop the factors, and a varimax rotation was employed. As shown in Table 2, this analysis yielded a nine-factor solution, and the following descriptive labels were assigned on the basis of item content: 1) Leadership and Assignment, 2) Preparation in the Reserve, 3) Habitability and Administration, 4) Community and Family Support, 5) Financial and Family Hardship, 6) In-processing and Out-processing, 7) Preparedness, 8) Command Staffing and Equipment, and 9) School Attendance and Dependent Care Hardship.

The items in these factors were then entered into a scaling analysis to determine internal consistency and reliability. The scale reliabilities (coefficient *alphas*), item-total correlations, and mean response values are presented in Table 3. The reliability of the School-Attendance-and-Dependent-Care scale was not sufficient (coefficient *alpha* = .41), and this two-item scale was removed from subsequent analyses. However, an inspection of the single item which assessed the impact of the recall on child care/dependent care provided some interesting observations. When asked to rate the hardship associated with child care/dependent care on a scale which ranged from 1 ("no hardship") to 5 ("severe hardship"), single parents generally perceived a greater impact (mean = 3.00) than married parents (mean = 2.52) [$t(301) = 4.82, p < .001$]. Approximately 18 percent of the single parents rated

Table 2

Factor Analysis Results on the 34 Scale-Format Items (N=3,738)

	Factor: 1	2	3	4	5	6	7	8	9
My final recall duty station was prepared to receive me when I arrived.	.47	.12	.36	-.02	.01	.15	-.15	.04	.44
My recall assignment was appropriate for my NOBC/NEC.	.59	.16	.19	.06	.04	.15	.30	.05	-.14
My skills were well utilized during my recall.	.82	-.02	.06	.07	.09	.07	.19	-.02	.17
I was well accepted at the command to which I was recalled.	.74	.07	.07	.06	-.01	.27	.01	.21	.16
At the command I was recalled to, the leadership was of high caliber.	.67	.10	.02	.03	.21	.05	.14	.24	.00
Training Opportunities -- satisfaction	.48	.36	.01	.41	.21	.15	-.10	.06	-.11
Recall Assignment -- satisfaction	.72	.23	.15	.31	.07	.03	-.01	-.02	.03
Overall Recall Experience -- satisfaction	.56	.25	.14	.51	.20	.19	.00	.17	.08
How well did Reserve training prepare you in clinical/professional skills? *	.15	.37	.14	.09	.04	.01	.22	.09	.07
How well did Reserve training prepare you in operational training? *	.02	.56	.05	.08	.13	.11	.14	.10	.05
How well did Reserve training prepare you in general military training? *	.11	.82	.15	.22	.01	.08	.01	.03	-.02
How well did Reserve training prepare you in leadership/management? *	.20	.24	.09	.07	.03	.06	.03	.03	-.03
Timeliness of Pay -- satisfaction	.12	-.09	.54	.08	.35	.30	-.11	.19	-.14
Availability of Uniforms -- satisfaction	-.02	.07	.56	-.06	.07	.08	.25	.18	-.07
Adequacy of Messing -- satisfaction	.11	.10	.76	.15	.06	.02	.07	.04	.13
Adequacy of Berthing -- satisfaction	.13	.12	.75	.17	.10	.03	-.03	.04	.19
Transfer of Credentialing/Privileging -- satisfaction	.13	.23	.65	.04	.09	.33	.08	.02	-.01
Benefits (medical/dental, etc.) -- satisfaction	.24	.15	.37	.48	.22	.16	.00	.12	-.22
Family Support -- satisfaction	.19	.13	.13	.74	.17	.06	.03	.05	-.06
Community Support -- satisfaction	.06	.21	.05	.77	-.09	.07	-.05	-.02	.19
Civilian Job/Practice -- hardship	-.19	-.08	.03	-.07	-.69	-.06	.07	.00	-.25
Financial Problems -- hardship	-.08	-.08	-.18	-.05	-.83	-.05	.10	-.07	-.04
Family/Relationship Separation -- hardship	-.04	-.04	-.23	-.20	-.55	.07	-.25	.12	-.37
Pay -- satisfaction	.15	.08	.41	.12	.63	.12	-.17	.27	-.26
The in-processing at the Reserve center/PSD/REDCEN was timely. *	.15	.11	.20	.05	.03	.87	.03	.05	.07
The in-processing at the Reserve center/PSD/REDCEN was professional. *	.25	.17	.11	.12	.04	.82	.10	.04	.01
My command released me from my recall assignment in a timely manner.	.21	-.01	.06	.39	.19	.42	.30	.19	.22
I was out-processed through PSD in a timely manner.	.07	-.03	.21	.37	.10	.50	.20	.20	.22
I had the professional knowledge/skills to perform my recall assignment.	.13	.10	.05	.00	-.08	.07	.83	.09	.03
I had the proper general military training to perform my recall assignment.	.18	.22	.11	.01	-.09	.13	.69	.11	-.06
The command to which I was recalled was appropriately staffed.	.09	.08	.14	.08	-.04	.12	.10	.80	.16
The command to which I was recalled was appropriately equipped.	.26	.15	.17	.04	.16	.06	.13	.78	.00
Child/Dependent Care -- hardship	.02	.02	.02	-.39	-.31	-.17	-.25	.12	-.49
School Attendance -- hardship	.15	-.03	-.06	-.01	-.14	-.09	.09	-.22	-.51

* Item wording is abbreviated.

Table 3
Scale Reliabilities and Mean Values

Quantitative Item Grouping	Corrected Item-Total Correlation	Standardized Coefficient <i>Alpha</i>	Mean
Preparation in the Reserve		.84	3.20
How well did your training in the Reserve prepare you for:			
your recall assignment in operational training?	.69		
your recall assignment in leadership/management training?	.69		
your recall assignment in general military training?	.67		
your recall assignment in clinical/professional skills training?	.66		
Leadership and Assignment		.84	3.61
My skills were well utilized during my recall.	.65		
I was well accepted at the command to which I was recalled.	.61		
Recall Assignment -- satisfaction	.65		
At the command I was recalled to, the leadership was of high caliber.	.51		
My recall assignment was appropriate for my NOBC/NEC.	.49		
Overall Recall Experience -- satisfaction	.68		
Training Opportunities -- satisfaction	.50		
My final recall duty station was prepared to receive me when I arrived.	.48		
In-Processing and Out-Processing		.72	3.77
The in-processing at the Reserve center/PSD/REDCEN was done in a timely manner.	.56		
The in-processing at the Reserve center/PSD/REDCEN was done in a professional manner.	.56		
I was out-processed through PSD in a timely manner.	.48		
My command released me from my recall assignment in a timely manner.	.44		
Habitability and Administration		.75	3.43
Adequacy of Messing -- satisfaction	.57		
Adequacy of Berthing -- satisfaction	.58		
Transfer of Credentialing/Privileging -- satisfaction	.48		
Availability of Uniforms -- satisfaction	.50		
Timeliness of Pay -- satisfaction	.45		
Financial and Family Hardship		.68	2.68
Financial Problems -- hardship	.64		
Civilian Job/Practice -- hardship	.42		
Pay -- dissatisfaction	.45*		
Family/Relationship Separation -- hardship	.33		
Command Staffing and Equipment		.61	3.44
The command to which I was recalled was appropriately staffed.	.44		
The command to which I was recalled was appropriately equipped.	.44		
Preparedness		.70	4.33
I had the professional knowledge/skills to perform my recall assignment.	.54		
I had the proper general military training to perform my recall assignment.	.54		
Community and Family Support		.63	3.83
Community Support -- satisfaction	.47		
Family Support -- satisfaction	.55		
Benefits (medical/dental, etc.) -- satisfaction	.31		
School Attendance and Dependent Care Hardship		.41	2.62
School Attendance -- hardship	.26		
Child/Dependent Care -- hardship	.26		

* Because hardship and satisfaction are inversely related, pay satisfaction values were reflected prior to analysis to indicate dissatisfaction.

the hardship as severe as opposed to about 10 percent of the married parents. Among single parents with only young (under age 13) children, a regression analysis was computed to identify factors associated with the perceived hardship of dependent care. In this analysis, the criterion variable was divided into two groups (moderate or severe hardship versus less than moderate hardship). The predictor variables included number of children, sex of parent, age of parent, adequacy of recall notification (adequate versus inadequate), distance to recall assignment (60 miles or less versus greater than 60 miles), officer versus enlisted status, and race (white versus all other). The results of this analysis indicated that sex of parent and number of dependent children were the only factors significantly associated with dependent care hardship ($p < .05$). These variables accounted for approximately 6 percent of the variance in the criterion. Mothers rated recall-related child care/dependent care as a greater hardship (mean=3.34) than fathers (mean=2.64), and single parents with more pre-teen children had higher scores. Given the expense of child care, this sex difference in perceived hardship may be associated with potential gender-based income differences in the private sector. Alternatively, a number of reservists who are single parents may be in stable cohabitant relationships, and the temporary transfer of parental responsibilities may be somewhat more difficult for mothers to a male partner than for fathers to a female partner.

Professional Corps

This section presents results of a series of analyses which were conducted to determine those aspects of the recall experience in which differences may have existed between members in different professional corps represented in this study. The mean responses of Medical Corps, Medical Service Corps, Nurse Corps, and Hospital Corps members were compared on each of the eight dependent variables assessed. It is noted that 10 percent of this Medical Corps group was comprised of Dental Corps officers ($n=43$), and 2 percent of the Hospital Corps group was comprised of Dental Technicians ($n=39$). Although the duty assignments included CONUS hospitals, CONUS Marine Corps support, hospital ships in the Gulf War, fleet hospitals in the Gulf War, and Marine Corps support in the Gulf War, there was not a sufficient sample size of each of the professional corps in each of the five assignment categories to conduct a completely

crossed factorial analysis. In fact, as shown in Table 4, each of the professional corps was represented adequately in only two of the assignments. These assignments were the CONUS hospitals and the fleet hospitals in the Gulf, which accounted for 78.4 percent of the entire sample.

Table 4
Distribution of Navy Medical Reservists
Across Recall Assignment

Recall Assignment							
	Count Row % Col. %	CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	Total
Corps	Medical Corps	253 59.7 11.7	33 7.8 13.8	18 4.2 8.7	97 22.9 17.0	23 5.4 16.7	424 12.8
	Medical Service Corps	132 75.4 6.1	9 5.1 3.8	1 .6 .5	32 18.3 5.6	1 .6 .7	175 5.3
	Nurse Corps	552 67.7 25.5	21 2.6 8.8	72 8.8 34.8	167 20.5 29.2	3 .4 2.2	815 24.5
	Hospital Corps	1,227 64.4 56.7	177 9.3 73.8	116 6.1 56.0	275 14.4 48.2	111 5.8 80.4	1,906 57.4
	Total	2,164 65.2	240 7.2	207 6.2	571 17.2	138 4.2	3,320 100.0

In order to control for any potential effects of assignment, only reservists who were assigned either to a CONUS hospital or to a fleet hospital in the Gulf were entered into the following analysis of professional corps. In addition, duty assignment (i.e., CONUS hospitals versus fleet hospitals) was entered as a covariate. Using the four levels of professional corps as the independent variable, an analysis of covariance was then computed on each of the eight dependent variables. The results of these analyses demonstrated that professional corps was significantly associated with each of the dependent variables ($p < .001$). A summary table of each analysis of covariance and the *post hoc* Scheffe comparisons is provided in Appendix C.

As shown in Figure 2, the pattern of results for the measures of Preparedness, In- and Out-Processing, Leadership and Assignment, Habitability and Administration, Command Staffing and Equipment, and Preparation in the Reserve was very consistent. Hospital Corpsmen responded less positively, and Medical Service Corps officers responded more positively. In the remaining two areas, however, Medical Corps officers indicated a greater Financial and Family Hardship than other groups, and perceived lower levels of satisfaction with Family and Community Support. This may

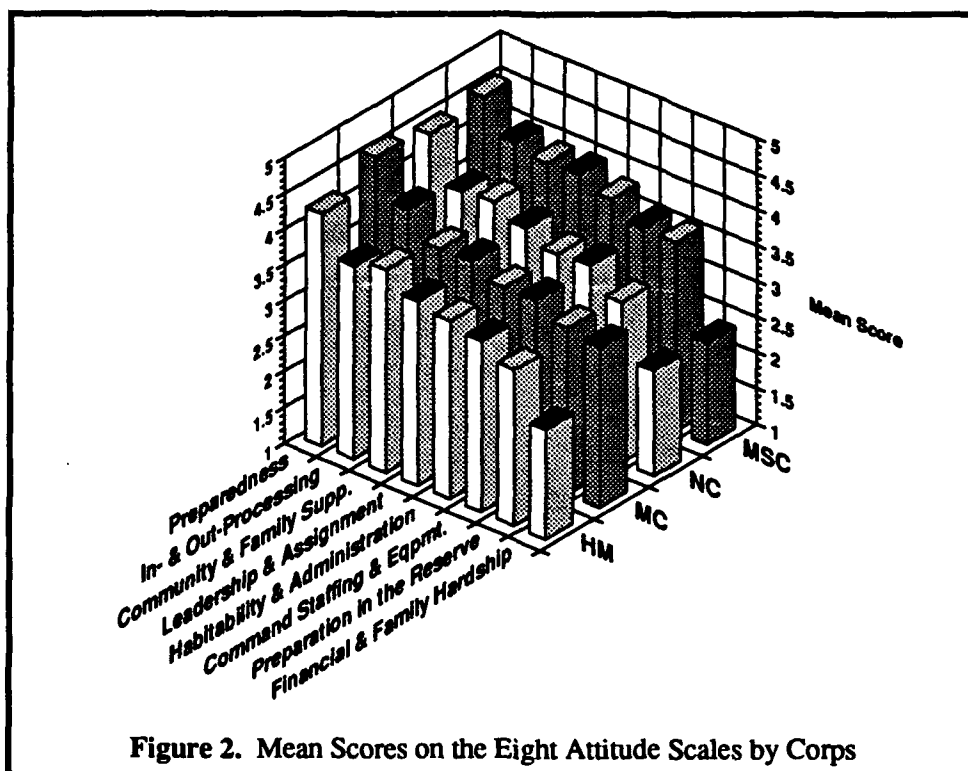


Figure 2. Mean Scores on the Eight Attitude Scales by Corps

have been reflective of the disruption caused to the practices of many of the physicians who were recalled. An inspection of the individual items in this scale, for example, showed that 35 percent of the Medical Corps officers indicated that the recall placed a severe hardship on their civilian job/practice. On the other hand, only 11 percent of all other reservists indicated that the recall placed a severe hardship on their civilian job/practice.

Assignment

Because each of the professional corps was not sufficiently represented in each of the assignments to conduct a completely crossed factorial analysis on corps by assignment, the professional corps were combined into a dichotomous variable which consisted of officers (i.e., Medical Corps, Medical Service Corps, and Nurse Corps) and enlisted personnel (i.e., Hospital Corps). This variable was labeled officer/enlisted status. Although professional corps differences were assessed across two assignments in the previous section, the officer/enlisted status variable was preserved in this set of analyses to assess any potential interactions with assignment. On each of the eight scales which assessed perceptions of the recall experience, an analysis of variance was computed to analyze the

effect of officer/enlisted status (2 levels) and assignment (5 levels). In order to adjust for the increased probability of making a Type I error by conducting more than one statistical test, the *alpha* for significance was established at a more conservative .01. The mean score for each corps at each assignment for each variable is presented in Appendix D. The mean score for each item, grouped by corps and assignment is presented in Appendix E.

In- and Out-Processing. This four-item scale addressed the perceived timeliness and professionalism exhibited during the intake and release processes. The overall mean was 3.77 which indicated general agreement that in-processing and out-processing were conducted in a timely and professional manner. Results of the analysis of variance indicated a significant main effect of officer/enlisted status [$F(1,3,507)=39.21, p<.001$] and assignment [$F(4,3,507)=12.91, p<.001$]. Officers (mean=3.90) were more satisfied with In- and Out-Processing than Hospital Corpsmen (mean=3.68). As shown in Figure 3, individuals who were assigned with Marine Corps support in the Gulf War were the least satisfied with In- and Out-Processing, and those assigned to the fleet hospital in the Gulf War were the most satisfied. The interaction

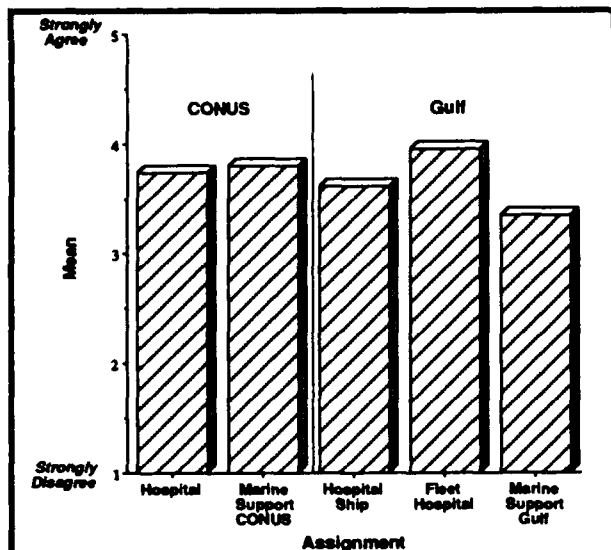


Figure 3. Mean Scores on the In-Processing and Out-Processing Scale by Recall Assignment

between officer/enlisted status and assignment was not statistically significant.

A separate analysis of the effects of seniority on perceptions of In- and Out-Processing indicated that senior enlisted (E-6 through E-9) were significantly more satisfied than junior enlisted (E-2 through E-5) [$t(1,472)=4.07, p<.001$], and senior officers (O-4 through O-6) were significantly more satisfied than junior officers (O-1 through O-3) [$t(1,222)=4.34, p<.001$]. Although the effects of seniority were statistically significant, the mean differences between senior and junior personnel were relatively small (enlisted: 3.79 versus 3.62; officer: 3.98 versus 3.77).

Preparedness. Preparedness was assessed through two items which addressed self-perceptions of possessing the requisite professional knowledge and skills, as well as the proper general military training, to perform the recall assignment. Reservists generally believed that they were well prepared to perform their recall assignments (mean=4.33); however, Hospital Corpsmen (mean=4.22) felt significantly less well prepared than officers (mean=4.49) [$F(1;3,473)=84.11, p<.001$]. Although the effect of assignment was statistically significant [$F(4;3,473)=4.33, p<.002$], the mean differences presented in Figure 4 are relatively small. With an α of .01, *post hoc* comparisons using the Scheffe test were not significant. Using a less conservative α of .05, however, indicated that individuals assigned to hospital ships or Marine

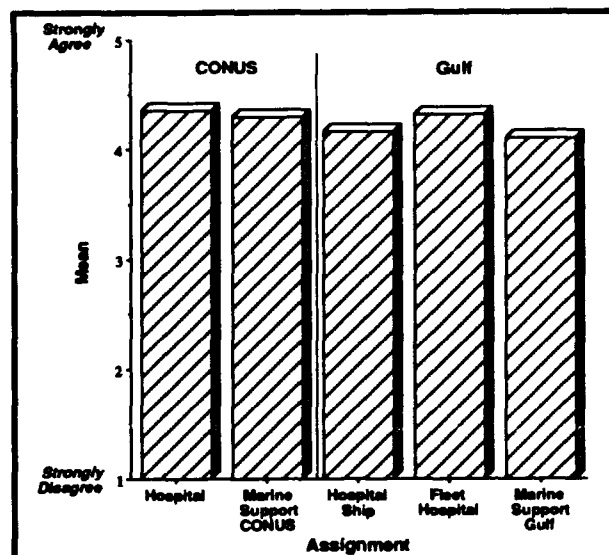


Figure 4. Mean Scores on the Preparedness Scale by Recall Assignment

support in the Gulf War felt significantly less well prepared than those assigned to a CONUS hospital. The interaction between officer/enlisted status and assignment was not statistically significant.

Self-perceptions of Preparedness were also positively associated with seniority, such that senior enlisted personnel (mean=4.36) felt more prepared than junior personnel (mean=4.14) [$t(1,572)=5.31, p<.001$], and senior officers (mean=4.59) felt better prepared than junior officers (mean=4.33) [$t(1,126)=6.52, p<.001$]. Because 40 percent of the Hospital Corpsmen in the sample reported that they had no prior active duty experience, an analysis was conducted to assess the relationship between prior active duty experience and Preparedness among Hospital Corpsmen. This analysis demonstrated that those individuals who had prior active duty experience felt significantly better prepared (mean=4.36) than those who had no prior active duty experience (mean=4.00) [$t(1,749)=9.09, p<.001$]. An additional analysis was then conducted among Hospital Corpsmen to examine the relationship between perceptions of Preparedness and working in a civilian career in which the skills are similar to those required by ones Navy Enlisted Classification (NEC). Approximately 52 percent of all Hospital Corpsmen in the sample were working in such civilian occupations. The results of this analysis indicated that working in a civilian occupation which required skills similar to those required by ones NEC was significantly associated with perceptions of preparedness [$t(2,061)=7.02, p<.001$].

Preparation in the Reserve. Preparation in the Reserve assessed the degree to which training in the Reserve prepared the reservist in the areas of operational issues, leadership/management, general military issues, and clinical/professional skills. The mean score on the scale was 3.22 which reflected a relatively modest endorsement of the reservist training program. Results of the analysis of variance on officer/enlisted status by assignment demonstrated a significant main effect of assignment [$F(4;3,373)=4.76, p<.001$]. As shown in Figure 5, individuals assigned to the hospital ships rated their training in the Reserve significantly lower than individuals assigned to the fleet hospitals in the Gulf War. Neither the main effect of officer/enlisted status nor the interaction of this variable and assignment was significant.

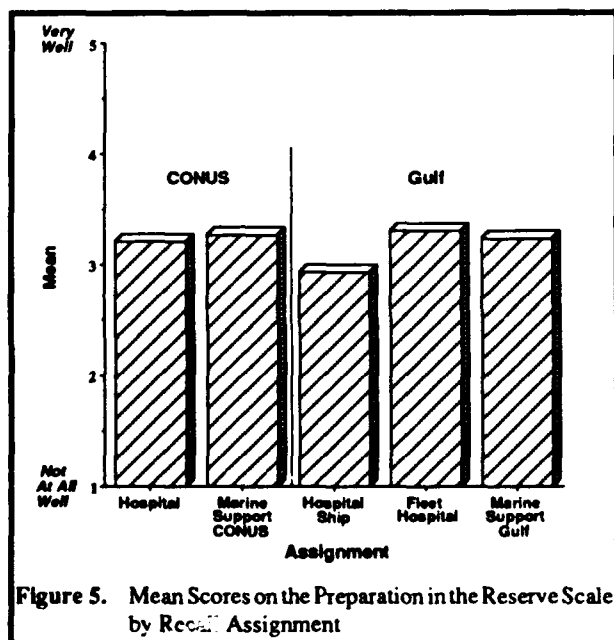


Figure 5. Mean Scores on the Preparation in the Reserve Scale by Recall Assignment

An analysis of the association between seniority and Preparation in the Reserve indicated that senior enlisted personnel responded significantly more positively (mean=3.44) than junior enlisted personnel (mean=3.05) [$t(1,478)=8.30, p<.001$]. Similarly, the more senior officers responded significantly more positively (mean=3.46) than the more junior officers (mean=3.01) [$t(1,246)=7.62, p<.001$]. Among Hospital Corpsmen, previous active duty experience was not significantly associated with perceptions of Preparation in the Reserve.

In addition to the items in the Preparation in

the Reserve scale, each reservist was asked to recommend the priority of a number of future training requirements for the drilling reservist. Based on their recall experience, slightly more than one-half of the sample (54%) identified Clinical/Professional Skills Training as the leading priority. The alternative top-priority selections were Operational Training (18%), Leadership/Management Training (16%), and General Military Training (11%). Responses from members who served in CONUS and in the Gulf War were very similar. A second question in the survey addressed the degree to which reservists attended additional training or educational opportunities during the recall. Overall, 62 percent of the reservists who served in the Gulf War and 55 percent of those who served in CONUS assignments received additional training during the recall.

Command Staffing and Equipment. This two-item scale assessed the appropriateness of the staffing and equipment at the command to which the reservist was recalled. The analysis of variance yielded a significant main effect of officer/enlisted status [$F(1;3,461)=21.78, p<.001$] and assignment [$F(4;3,461)=34.54, p<.001$], as well as a significant interaction effect [$F(4;3,461)=6.88, p<.001$]. As shown in Figure 6, officers were more satisfied with Staffing and Equipment than were the Hospital Corpsmen, and reservists assigned to a hospital ship or a CONUS hospital were more satisfied than those assigned to Marine support or to a fleet hospital in the Gulf War. In addition, an interaction occurred

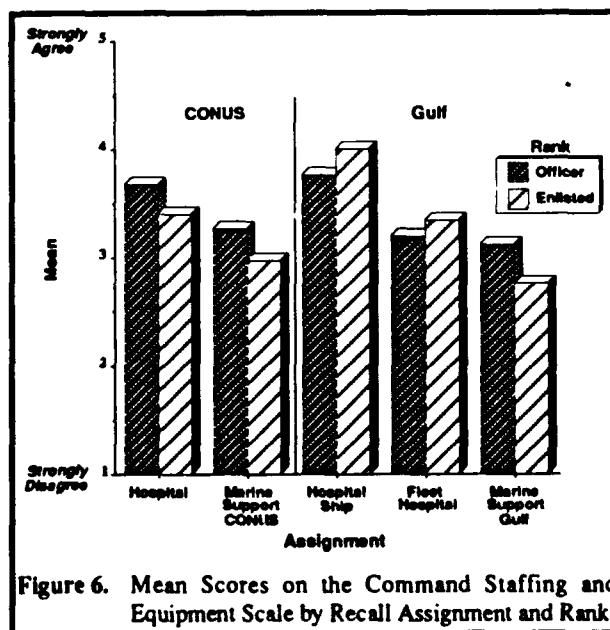


Figure 6. Mean Scores on the Command Staffing and Equipment Scale by Recall Assignment and Rank

such that while officers assigned to CONUS hospitals, Marine support CONUS, or Marine support in the Gulf War were generally more positive than Hospital Corpsmen, those officers assigned to the hospital ships or the fleet hospitals in the Gulf War were less positive than Hospital Corpsmen. Some interpretation of this effect may be achieved by using the officer and enlisted scores at the CONUS hospitals as a benchmark to compare those scores achieved aboard the hospital ships and the fleet hospitals in the Gulf War. Although perceptions of Staffing and Equipment were relatively similar between officers at the CONUS hospitals and the hospital ships, they were substantially lower among officers assigned to the fleet hospitals in the Gulf War. Among enlisted Hospital Corpsmen, on the other hand, perceptions regarding Staffing and Equipment were fairly similar between those assigned to the CONUS hospitals and the fleet hospitals in the Gulf War; however, they were substantially more positive aboard the hospital ships. From this comparison, it could be concluded that Staffing and Equipment was a relatively negative issue for officers assigned to the fleet hospitals in the Gulf War and a relatively positive issue for the Hospital Corpsmen assigned to the hospital ships.

Separate analyses were computed for officers and Hospital Corpsmen to assess the effect of seniority within each community on perceptions of Staffing and Equipment. These analyses demonstrated that for both officers and enlisted personnel, seniority was not significantly associated with perceptions of Staffing and Equipment.

Habitability and Administration. The five-item Habitability and Administration scale assessed the adequacy of messing and berthing, the availability of uniforms, the timeliness of pay, and the satisfaction with transfer of credentialing/privileging. Results of the analysis of variance indicated a significant main effect of assignment [$F(4;3,479)=44.51, p<.001$], and a significant interaction effect [$F(4;3,479)=4.11, p<.003$]. As shown in Figure 7, Habitability and Administration was most positive in CONUS hospitals and least positive in Marine support assignments in the Gulf War. While officers' and enlisted Hospital Corpsmen's perceptions were generally very similar, officers aboard the hospital ships viewed Habitability and Administration somewhat less positively than Hospital Corpsmen. An inspection of the data revealed that this difference was evident for both

Nurse Corps and Medical Corps officers aboard the hospital ships. An examination of the individual items indicated that the greatest differences between officers aboard the hospital ships and officers in other assignments were in the areas of timeliness of pay and availability of uniforms. Interestingly, the adequacy of messing was viewed somewhat more positively among officers aboard the hospital ships. The main effect of officer/enlisted status was not statistically significant.

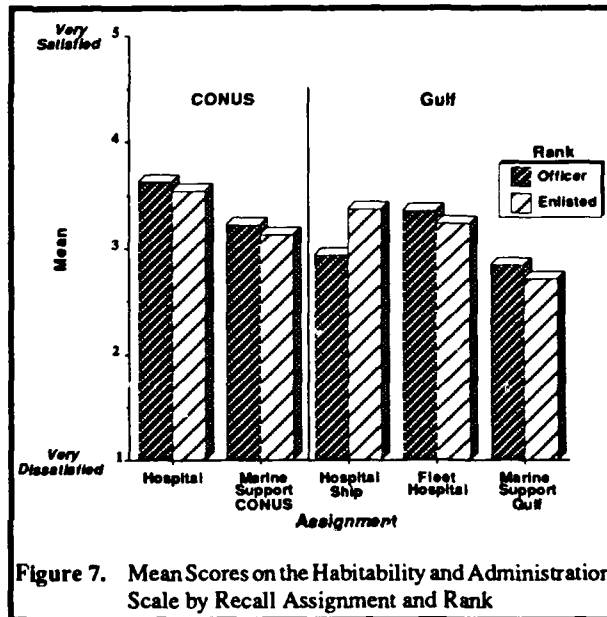
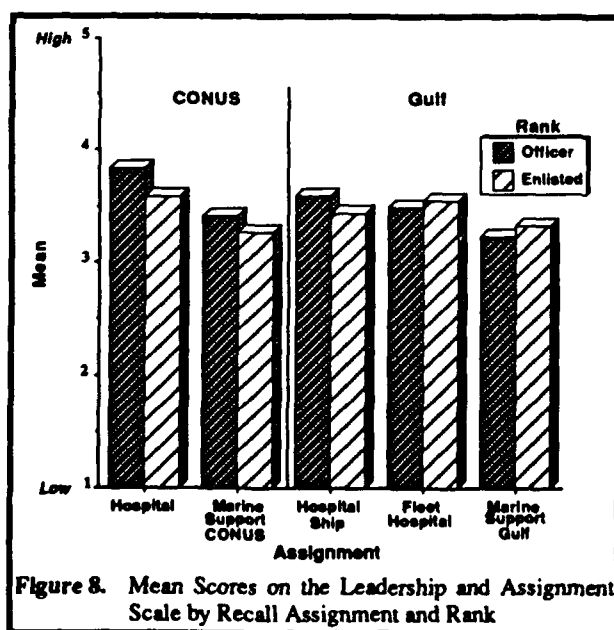


Figure 7. Mean Scores on the Habitability and Administration Scale by Recall Assignment and Rank

Within the Hospital Corpsmen community, perceptions of Habitability and Administration did not differ significantly between senior and junior personnel. Within the officer community, however, more senior officers held significantly more positive attitudes toward Habitability and Administration (mean=3.59) than the more junior officers (mean=3.39) [$t(1,191)=3.80, p<.001$].

Leadership and Assignment. An eight-item scale assessed perceptions of leadership caliber and assignment satisfaction. These items addressed skills utilization, acceptance by the gaining command, assignment appropriateness for a given NOBC/NEC, preparation to receive reservists by the gaining command, training opportunities, leadership caliber, assignment satisfaction, and satisfaction with the overall recall experience. The results of the analysis of variance on officer/enlisted status by assignment demonstrated that both main effects and the interaction effect were significant. As shown in Figure 8, officers (mean=3.71) expressed

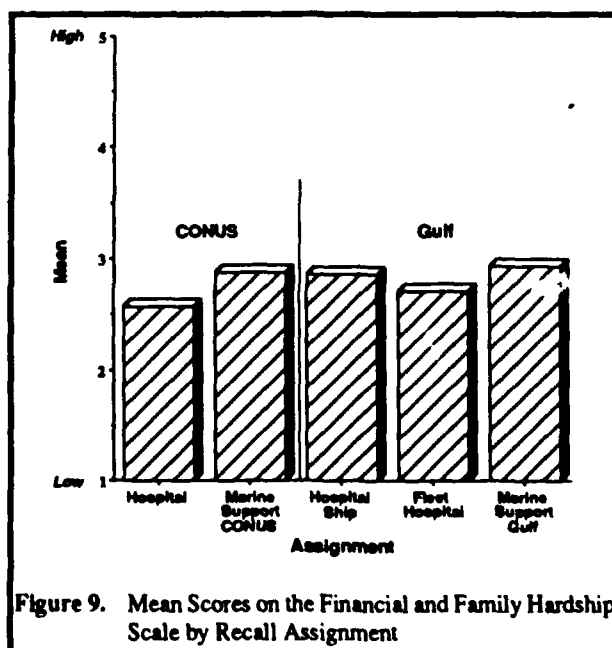
more positive assessments than enlisted Hospital Corpsmen (mean=3.53) [$F(1;3,507)=30.01, p<.001$], and individuals assigned to the CONUS hospitals (mean=3.68) expressed significantly more positive perceptions of Leadership and Assignment than individuals with Marine support CONUS (mean=3.30) or Marine support in the Gulf War (mean=3.31) [$F(4;3,507)=16.13, p<.001$]. Although statistically significant, the interaction effect was not of great magnitude and is difficult to interpret. In comparing the CONUS hospital results with those obtained in the hospital ships and the fleet hospitals in the Gulf War, it appears that the perceptions of the Hospital Corpsmen were relatively consistent across assignments. The mean scores of the officers assigned to the fleet hospitals in the Gulf War and the hospital ships, on the other hand, were somewhat lower than those expressed by the officers in the CONUS hospitals. Similarly, a comparison of Hospital Corpsmen scores between Marine support in CONUS and Marine support in the Gulf War appeared relatively consistent. Officers assigned to Marine support in the Gulf War, however, had somewhat lower scores than officers assigned to Marine support in CONUS.



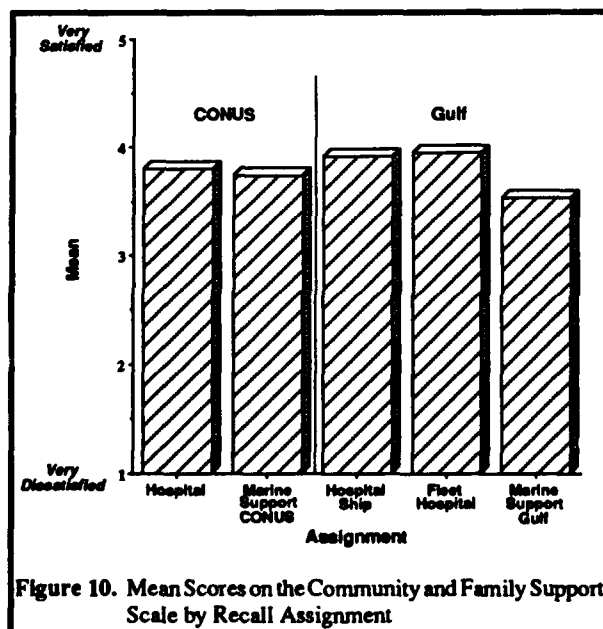
An analysis of the effect of seniority on perceptions of Leadership and Administration indicated a relatively small, but significant, effect within the enlisted Hospital Corpsmen community such that senior personnel (mean=3.60) were more

satisfied than junior personnel (mean=3.48) [$t(1,467)=2.82, p<.005$]. The effect was not significant within the officer community.

Financial and Family Hardship. This four-item scale assessed perceptions of hardship regarding finances, civilian job or practice, and family or relationship separation. In addition, it assessed the level of dissatisfaction with pay. The analysis of variance demonstrated a significant main effect of officer/enlisted status and assignment. Overall, officers (mean=2.73) expressed a higher level of hardship than enlisted personnel (mean=2.59) [$F(1;3,425)=22.04, p<.001$]. This may have been due, in large measure, to the financial losses experienced among Medical Corps officers during their participation in the recall. For example, 63 percent of the Medical Corps officers indicated that the recall imposed a moderate to severe hardship on their civilian job or practice, while only 25 percent of all other personnel indicated a moderate to severe hardship. Similarly, 42 percent of the Medical Corps officers identified a moderate or severe hardship on financial problems, while only 24 percent of all other reservists indicated a moderate or severe hardship on financial problems. As shown in Figure 9, the lowest level of hardship was experienced in the CONUS hospitals [$F(4;3,425)=13.95, p<.001$]. The interaction effect was not significant. The effect of seniority was assessed among the officers and the enlisted Hospital Corpsmen, and was not statistically significant.



Community and Family Support. The Community and Family Support variable was assessed with a three-item scale which addressed community support, family support, and satisfaction with benefits. The overall mean was 3.82 which indicated a relatively high endorsement for this set of items. The results of the analysis of variance demonstrated a significant main effect of assignment [$F(4;3,413)=7.73, p<.001$]. As shown in Figure 10, individuals assigned to the hospital ships or the fleet hospitals in the Gulf War exhibited slightly higher scores on the Community and Family Support variable than reservists assigned to other duty stations. The main effect of officer/enlisted status and the interaction effect were not significant. An analysis of the effect of seniority was also not significant.



Gender

As shown in Table 5, within the Nurse Corps and Hospital Corps there were sufficiently large numbers of women in a variety of assignments to support a series of analyses on gender differences in perceptions of the recall process. Among Nurse Corps officers, there were sufficient numbers of men and women assigned to CONUS hospitals, hospital ships, and fleet hospitals in the Gulf War to include these assignments in the analyses. Each of these assignments, as well as Marine support CONUS, was also included in the analyses of men and women who belonged to the Hospital Corpsmen

Table 5
Distribution of Nurse Corps and Hospital Corps Reservists
Across Recall Assignment by Sex

Nurse Corps						
Recall Assignment						
Count Row % Col. %	CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	Total
Sex						
Men	54 46.2 9.8	7 6.0 33.3	20 17.1 27.8	34 29.1 20.4	2 1.7 66.7	117 14.4
Women	498 71.3 90.2	14 2.0 66.7	52 7.4 72.2	133 19.1 79.6	1 .1 33.3	698 85.6
Total	552 67.7	21 2.6	72 8.8	167 20.5	3 .4	815 100.0

Hospital Corps						
Recall Assignment						
Count Row % Col. %	CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	Total
Sex						
Men	655 57.5 53.4	157 13.8 88.7	59 5.2 50.9	159 14.0 58.0	109 9.6 98.2	1139 59.8
Women	571 74.6 46.6	20 2.6 11.3	57 7.5 49.1	115 15.0 42.0	2 .3 1.8	765 40.2
Total	1,226 64.4	177 9.3	116 6.1	274 14.4	111 5.8	1,904 100.0

community. Because of the potential confounding effects of extraneous variables such as the level of seniority (junior versus senior) and previous active duty experience (yes/no), these variables were statistically controlled through covariance procedures in the following set of analyses.

Nurse Corps Officers. A series of analyses of covariance was conducted to assess the effect of gender on each of the eight dependent measures assessed in this study. The α level was set at .01. Among Nurse Corps officers, there were no gender-related differences in seven of the eight areas of the recall experience. Financial and Family Hardship demonstrated the only significant gender effect [$F(1;755)=10.70, p<.001$] such that men reported a higher level of hardship (mean=2.79) than women (mean=2.46).

Hospital Corpsmen. A set of analyses of covariance similar to those conducted on the Nurse Corps officer data, was computed on the men and women reservists who were members of the Hospital Corps. Similar to the Nurse Corps results, there was a significant association between gender and Financial and Family Hardship [$F(1;1,739)=8.04,$

$p < .005$] such that men reported a higher level of hardship (mean=2.63) than women (mean=2.50). In addition, male Hospital Corpsmen (mean=4.33) perceived themselves as significantly better prepared [$F(1;1,756)=10.77, p < .001$] to perform their recall assignments than female Hospital Corpsmen (mean=4.11). Females (mean=3.62), on the other hand, reported significantly higher levels of satisfaction with Leadership and Assignment than the males (mean=3.47) [$F(1;1,772)=9.35, p < .001$]. Although these differences in Preparedness and in Leadership and Assignment are statistically significant, they are relatively small and may be of limited practical significance.

DISCUSSION

The large-scale recall of reservists for Operations Desert Shield/Storm represented the first real implementation of the Total Force policy within U.S. Navy medicine. The majority of medical reservists were recalled during August, 1990, or in January or February of 1991. Although there were some problems with inadequate notification times during the first recall in August, most of the reservists believed that they received adequate notification time, and that their in-processing was conducted in a timely and professional manner. In general, enlisted personnel and more junior personnel (officers and enlisted) were somewhat less satisfied with the timeliness and professionalism of the in-processing than were officers and more senior personnel. It is not clear whether this difference reflects actual in-processing behaviors and policies, or the tendency for more senior personnel to respond more favorably. In addition, the results indicated that reservists who were assigned to Marine Corps support in the Gulf War, and to a lesser extent those assigned aboard the hospital ships, experienced more problems with in-processing and out-processing.

Based on an inspection of the concordance between Reserve program affiliation (e.g., Surface Medical Program, Fleet Marine Force Program, etc.) and actual recall assignment, most assignments appeared consistent with the Reserve program affiliation. Another indication of the efficiency of the initial recall process was the fact that only 12 percent of the reservists indicated that their original orders had been modified.

Those medical reservists who were recalled were generally confident that they had the

professional knowledge and skills, as well as the proper general military training to perform their recall assignments. This confidence was positively related to previous active duty experience and to working in a civilian occupation which required skills similar to those needed in the Reserve. This finding may have implications for staffing at the unit level to achieve an optimum distribution of experienced personnel. In general, officers were more confident in their level of preparedness than the Hospital Corpsmen, and more senior personnel (officers and enlisted) felt better prepared than more junior personnel. Some of this difference may be attributable to the fact that Hospital Corpsmen may be required to perform a range of duties outside their specialty training (e.g., supply, administration, logistics). These diverse demands may have adversely affected perceptions of preparedness.

Although the reservists believed that they were well prepared for their recall assignments, the reservist training program was not strongly endorsed by any community. Members assigned to the hospital ships reported the lowest level of training adequacy. These results suggest the need to review Navy medical reservist training policies and procedures. Additional familiarization with shipboard environments and Authorized Medical Allowance List equipment should be considered.

The operational aspects of the recall were assessed in three scales which addressed Command Staffing and Equipment, Habitability and Administration, and Leadership and Assignment satisfaction. In each of these areas, the mean scores, which ranged from 3.4 to 3.6 on a five-point scale, indicated a modest positive endorsement of the contributing items. As a general trend across these operationally-oriented scales, reservists assigned to CONUS hospitals rated items more positively than reservists assigned to Marine support; and Hospital Corpsmen rated items less positively than Medical Corps, Nurse Corps, or Medical Service Corps officers.

Within each scale, however, there were some interesting interactions between officer/enlisted status and assignment. Perceptions of Staffing and Equipment, for example, were generally higher among reservists assigned to CONUS hospitals or hospital ships compared with those assigned to Marine support (CONUS or Gulf War) or fleet hospitals in the Gulf War. Although officers rated Staffing and Equipment somewhat more positively

than Hospital Corpsmen in CONUS hospitals and in Marine support (CONUS and Gulf War), this was not the case in the fleet hospitals in the Gulf War or aboard the hospital ships. Compared with the responses of officers in CONUS hospitals or hospital ships, the perceptions of officers assigned to fleet hospitals appeared low. An inspection of the items in the scale indicated that the primary issue for both Medical Corps and Nurse Corps officers in fleet hospitals was equipment rather than staffing. Although much of this effect may have been due to fact that Operations Desert Shield/Storm occurred during a conversion of the Authorized Medical Allowance List for fleet hospitals, this result suggests the need to review medical equipment issues within the fleet hospitals. Similarly, the relatively lower perceptions of Staffing and Equipment among reservists assigned with Marine support units in both CONUS and the Gulf War, indicates attention to this matter. The perceptions of Hospital Corpsmen aboard hospital ships, on the other hand, were more positive than those assigned to any other duty station. This effect was due to the perceptions of both staffing and equipment.

In general, perceptions of Habitability and Administration were lowest among reservists serving with the Marines in the Gulf War. For both officers and enlisted personnel, ratings within this group were lower on timeliness of pay, availability of uniforms, messing, and berthing. Given the logistic difficulties in supporting forward-deployed personnel in time of war, this result was not unusual. The relatively low perceptions of Habitability and Administration among officers assigned to the hospital ships, however, was not anticipated. Both Medical Corps and Nurse Corps officers aboard these ships rated timeliness of pay, and availability of uniforms relatively low. Some of this dissatisfaction with the timeliness of pay aboard hospital ships may have been due to the fact that these personnel may have had better access to liberty and shopping opportunities than personnel in the fleet hospitals or with Marine support units in the Gulf. In addition, Nurse Corps officers assigned to hospital ships rated adequacy of berthing low. On the other hand, personnel aboard hospital ships rated the adequacy of messing more positively than personnel assigned to any other duty station. These data indicate that administrative policies and procedures (i.e., fiscal, uniforms) aboard hospital ships should be reviewed.

The scale which assessed Leadership and Assignment satisfaction revealed significant, but relatively small overall differences between officers and enlisted personnel and between personnel assigned to different duty stations. In general, the scale means indicated that personnel assigned to CONUS hospitals reported more positive scores than those assigned with the Marines, and officers responded more positively than enlisted personnel. An inspection of the individual items, however, revealed some rather substantial differences. The most dramatic finding was that across all corps, reservists assigned to the fleet hospitals in the Gulf War rated leadership caliber substantially lower than reservists in any other duty assignment. This finding suggests a problem within the highest levels of the fleet hospital commands and may have implications for screening or selection of commanding officers. On the other hand, relative dissatisfaction with leadership may have been associated with the reservists' lack of appreciation of the limits of authority of the medical commanding officer. A number of contentious policies, such as liberty and logistics, were often set by operational commanders and were beyond the span of control of the fleet hospitals' commanding officers. These organizational issues should be emphasized in reservist training. Officers assigned to fleet hospitals also reported that these commands were generally less well prepared to receive the reservists. Nurse Corps officers also indicated that the hospital ships were not well prepared to receive them. Reservists who served aboard the hospital ships also reported that their skills were not as well utilized as those of reservists in other assignments. This was probably due to the relatively low patient load experienced aboard these ships. Nurse Corps officers also felt somewhat less well accepted aboard the hospital ships. Finally, the lowest ratings of satisfaction regarding the appropriateness of the assignment for their NOBC/NEC and with the overall recall experience were expressed by reservists assigned to Marine support, both in CONUS and in the Gulf War.

The greatest financial hardships during the recall were experienced by the Medical Corps and Dental Corps officers. Approximately 35 percent of these reservists believed that the recall placed a severe hardship on their medical or dental practice, and 42 percent were experiencing a moderate or severe hardship regarding their finances. Similarly

Medical Corps officers reported generally lower levels of satisfaction with Community and Family Support, specifically in the areas of family support and satisfaction with benefits. From these data it is not possible to determine the long-term adverse effects on the private practices of those Medical and Dental Corps officers who were recalled. Anecdotally, there is some indication that local members of the professional communities often organized their schedules to cover for reservists who were recalled. Reserve centers should actively pursue these contingency arrangements with the professional organizations within their communities.

Overall in this study there were very few gender-related differences. Among Nurse Corps officers and Hospital Corpsmen, men expressed a significantly higher level of Financial and Family Hardship than women. This effect may largely be due to differential gender-based earning power in the private sector. If men have higher incomes than women in their civilian jobs, they may perceive a greater financial hardship associated with the recall process. Among single parents, on the other hand, mothers expressed higher levels of hardship with child care/dependent care than fathers. Given the expense of child care, this difference may also be associated with potential income differences in the private sector. It should be noted, however, that only 10 percent of the women and 3 percent of the men were single parents, and that even among single parents, the mean level of child care hardship was midway between "no hardship" and "severe hardship." Therefore, these data indicate that child care needs were reasonably well met by most reservist parents who were recalled.

In general, Navy medical reservists recalled during Operations Desert Shield/Storm believed that they were well prepared to meet the challenges of their assignments, and were reasonably well satisfied with the recall experience. While the lessons of Desert Storm may provide opportunities to further improve the Total Force policy, the results of this study indicate that the Navy medical recall procedures met the challenge of responding to rapidly moving, real world events. These findings are particularly meaningful given that the United States turns most often to the Navy as the service of choice when employing armed forces in support of political objectives.⁴ In an era of diminishing active-duty resources, the reserve forces will be expected to participate more actively in meeting the burden of a broader range of operational requirements and contingencies.

REFERENCES

1. Guthrie, W. N., Jr., Baumgardner, H., & Chaloupka, M. (1990). The Reserve Is Ready and Waiting. *U.S. Naval Institute Proceedings*, 116(9), 46-51.
2. Sharp, B. F., Jr., & Skipper, D. B. (1984). The Reserve Component Dilemma: Mission Versus Time. *Military Review*, LXIV(11), 62-79.
3. Rucker, R. C. (Ed.) (1991). The Total Force: Reservists Hit the Ground Running. *All Hands, Special Issue*(892), 46-8.
4. Zelikow, P. D. (1984). Force Without War, 1975-82. *The Journal of Strategic Studies*, 7(1), 29-54.

Please complete this survey *immediately*
and use the enclosed envelope to return
it to:

Commanding Officer
Attn: Medical Reservist Survey
Naval Health Research Center
P.O. Box 85122
San Diego, CA 92186-5122

OPERATION DESERT STORM RESERVE MEDICAL SURVEY

Demographics

1. Sex: ☐ 1. Male
☐ 2. Female
 2. Age: ____ years
 3. Race: ("x" one)
☐ 1. White
☐ 2. Black
☐ 3. Hispanic
☐ 4. Filipino/Pacific Islander
☐ 5. Asian
☐ 6. Other, specify: _____
 4. Number of Dependent Children Living with You: ____
(Ages 1-12)
(If none, enter zero) ____
(Ages 13-17)
 5. Marital Status: ("x" one)
☐ 1. Single
☐ 2. Married
☐ 3. Legally Separated / Divorced
☐ 4. Other, specify _____
 6. Spouse's Military Status: ("x" one)
☐ 1. No Spouse
☐ 2. Spouse Not in Military
☐ 3. Active Duty Military
☐ 4. Military Reserve, not recalled
☐ 5. Military Reserve, recalled
 7. Spouse's Employment Status: ("x" one)
☐ 1. No Spouse
☐ 2. Spouse Not Employed
☐ 3. Full-Time
☐ 4. Part-Time
 8. Are you self-employed? ☐ 1. No
☐ 2. Yes
 9. Active Duty Service Prior to Joining the Reserves: ☐ 1. No
☐ 2. Yes
 10. Highest Educational Degree Obtained: ("x" one)
☐ 1. Less than High Sch. ☐ 4. B.A./B.S.
☐ 2. High School ☐ 5. M.A./M.S.
☐ 3. A.A. (2 yrs. college) ☐ 6. Doctoral
 11. At the time of your recall, were you enrolled in an educational program toward a degree in a health field? ☐ 1. No
☐ 2. Yes, Part-time
☐ 3. Yes, Full-time
 12. Are the skills used in your civilian occupation similar to those required by your NOBC/NEC?
☐ 1. No
☐ 2. Yes
13. Enlisted Only:
a. Paygrade E - ____ (enter digit 1-9)
b. Primary NEC: _____
14. Officer Only:
a. Rank O - ____ (enter digit 1-6)
W - ____ (Warrant, enter digit 1-4)
b. Officer Designator: _____
c. NOBC: _____

In-Processing

1. Month Recalled to Active Duty: ("**x**" one)
- | | | |
|-----------------------------------|----------------------------------|-----------------------------------|
| ☐ 1. Jan. | ☐ 5. May | ☐ 9. Sept. |
| ☐ 2. Feb. | ☐ 6. June | ☐ 10. Oct. |
| ☐ 3. Mar. | ☐ 7. July | ☐ 11. Nov. |
| ☐ 4. April | ☐ 8. Aug. | ☐ 12. Dec. |

2. Prior to Desert Shield, were you aware that you could be recalled in the event of a national emergency?
- ☐ 1. No
☐ 2. Yes

3. Naval Reserve Program Prior to Recall: ("**x**" one)
- ☐ 1. Program 32 (Hospital or Clinic)
☐ 2. Program 46 (Fleet Hospital)
☐ 3. Program 9 (Marine Support)
☐ 4. Program 5 (Air Unit)
☐ 5. Other, specify: _____

4. Recall Destination: ("**x**" one)
- ☐ 1. Continental U.S. (CONUS)
☐ 2. Persian Gulf Area
☐ 3. Other, specify: _____

5. Approximate number of **miles** from home to recall assignment, *if CONUS*: _____

6. In what U.S. state is your reserve unit based? (*enter 2-letter postal code*) _____

7. Time between notification (phone) and reporting deadline for in-processing: _____ **days**

8. Was notification time adequate?
- ☐ 1. No
☐ 2. Yes

9. Were you aware during in-processing of the delay/exemption policy?
- ☐ 1. No
☐ 2. Yes

10. Did you request a delay/exemption under this policy?
- ☐ 1. No
☐ 2. Yes, Granted
☐ 3. Yes, Denied

11. Were you treated fairly under the delay/exemption policy?
- ☐ 1. No
☐ 2. Yes
☐ 3. Not Applicable

The in-processing at the Reserve center/PSD/REDCEN was done in a:

12. Timely Manner

13. Professional Manner

Strongly
Disagree

(*circle one # per item*)

Strongly
Agree

1

2

3

4

5

1

2

3

4

5

Recall Assignment

1. Under what type of orders were you recalled?

- ☐ 1. Voluntary
☐ 2. Voluntary converted to involuntary
☐ 3. Involuntary

2. Recall assignment (Platform Type): ("**x**" one)

- ☐ 1. Medical/Dental Treatment Facility, Clinic
☐ 2. Fleet Hospital
☐ 3. Marine Support
☐ 4. Hospital Ship
☐ 5. Other, specify: _____

3. **Excluding** an extension of active duty, were your original orders modified during recall?

- ☐ 1. No
☐ 2. Yes, changed duty station, same platform type
☐ 3. Yes, changed platform type and duty station
☐ 4. Yes, specify: _____

4. Were additional training/education opportunities offered to you during your recall?

- ☐ 1. No
☐ 2. Yes, but I did not attend any
☐ 3. Yes, and I attended

5. As a result of your recall assignment, did your clinical/professional skill

- ☐ 1. Decrease?
☐ 2. Stay the same?
☐ 3. Increase?

Please use the scale to rate your level of agreement with each of the following:

(Circle one number per item.)

	Strongly Disagree			Strongly Agree		
6. My final recall duty station was prepared to receive me when I arrived.	1	2	3	4	5	
7. My recall assignment was appropriate for my NOBC/NEC.	1	2	3	4	5	
8. My skills were well utilized during my recall.	1	2	3	4	5	
9. I was well accepted at the command to which I was recalled.	1	2	3	4	5	
10. The command to which I was recalled was appropriately staffed.	1	2	3	4	5	
11. The command to which I was recalled was appropriately equipped.	1	2	3	4	5	
12. I had the professional knowledge/skills to perform my recall assignment.	1	2	3	4	5	
13. I had the proper general military training to perform my recall assignment.	1	2	3	4	5	
14. At the command I was recalled to, the leadership was of high caliber.	1	2	3	4	5	

Please use the scale to rate your level of satisfaction with each of the following as each pertains to your recall experience:

(Circle one number per item.)

	Very Dissatisfied			Very Satisfied		
15. Timeliness of Pay	1	2	3	4	5	
16. Availability of Uniforms	1	2	3	4	5	
17. Adequacy of Messing	1	2	3	4	5	
18. Adequacy of Berthing	1	2	3	4	5	
19. Transfer of Credentialing/Privileging	1	2	3	4	5	

(if not applicable, leave blank)

Out-Processing

(Complete this box ONLY IF you have been released from active duty.)

1. How long was your recall period?

_____ months.

2. After the completion of your recall mission, how long did your out-processing take?

_____ days.

3. Did you receive a fitness report/enlisted evaluation prior to your release from active duty?

- ☐ 1. No
☐ 2. Yes
☐ 3. Don't know

Please use the scale to rate your level of agreement with each of the following:

(Circle one number per item.)

	Strongly Disagree			Strongly Agree		
4. My command released me from my recall assignment in a timely manner.	1	2	3	4	5	
5. I was out-processed through PSD in a timely manner.	1	2	3	4	5	

(Continue to page 4)

Please use the scale to rate the impact of the recall on you for each of the following:
(Circle one number per item.)

	(Does Not Apply)	No Hardship				Severe Hardship
6. Child Care / Dependent Care	0	1	2	3	4	5
7. Civilian Job/Practice	0	1	2	3	4	5
8. School Attendance	0	1	2	3	4	5
9. Financial Problems		1	2	3	4	5
10. Family/Relationship Separation		1	2	3	4	5

Please use the scale to rate your level of satisfaction with each of the following as each pertains to your recall experience:

(Circle one number per item.)	Very Dissatisfied				Very Satisfied
11. Pay	1	2	3	4	5
12. Benefits (medical/dental, etc.)	1	2	3	4	5
13. Training Opportunities	1	2	3	4	5
14. Family Support	1	2	3	4	5
15. Community Support	1	2	3	4	5
16. Recall Assignment	1	2	3	4	5
17. Overall Recall Experience	1	2	3	4	5

How well did your training in the reserves prepare you for your recall assignment in the following areas:

(Circle one number per item.)	Not At All Well				Very Well
18. Clinical/Professional Skills Training	1	2	3	4	5
19. Operational Training (equipment, tents, environmental, etc.)	1	2	3	4	5
20. General Military Training (Navy regulations, uniforms, chain of command, etc.)	1	2	3	4	5
21. Leadership/Management Training (LMET, command excellence seminars, etc.)	1	2	3	4	5

22. Based on your recall experience, recommend the priority for each of the following future training requirements for the drilling reservist: (Use "1" for highest priority, through 4" for 4th-highest priority.)

- ☐ Clinical/Professional Skills Training
☐ Operational Training
☐ General Military Training
☐ Leadership/Management Training

23. Month Released from Active Duty: ("x" one)

- | | | |
|---|----------------------------------|-----------------------------------|
| ☐ 1. Jan. | ☐ 5. May | ☐ 9. Sept. |
| ☐ 2. Feb. | ☐ 6. June | ☐ 10. Oct. |
| ☐ 3. Mar. | ☐ 7. July | ☐ 11. Nov. |
| ☐ 4. April | ☐ 8. Aug. | ☐ 12. Dec. |
| ☐ 13. not yet released | | |

24. Based on your experience, how well did the reservists perform in comparison with their active duty counterparts?

- ☐ 1. Not As Well
☐ 2. Same
☐ 3. Better
☐ 4. Unable to Observe

25. What is your present Navy intent?

- ☐ 1. Remain in the reserves in drilling status
☐ 2. Transfer to the IRR
☐ 3. Resign from the reserves
☐ 4. Apply for recall to active duty
☐ 5. Other, specify: _____

26. To what degree was your present Navy intent affected by your recall experience? (Circle one)

Not At All				Very Much
1	2	3	4	5

Please be candid, concise, and legible. (Continue on back as needed.)

27. If your recall experience affected your plans for your Naval Reserve career, please indicate the primary reason. *(If it did not, skip this item.)*

28. Identify the three most positive aspects of your recall experience.

1.

2.

3.

29. Identify the three most negative aspects of your recall experience.

1.

2.

3.

30. What can the Navy do to improve the effectiveness of any future recall?

1.

2.

3.

Thank you for your cooperation!

Appendix B
Scale and Scale Item Mean Values by Corps

Scale and Scale Items	Mean Response				
	All	MC	MSC	NC	HM
In-Processing and Out-Processing	3.77	4.02	4.03	3.81	3.67
The in-processing at the Reserve center/PSD/REDCEN was done in a timely manner.	3.59	3.90	3.91	3.60	3.49
The in-processing at the Reserve center/PSD/REDCEN was done in a professional manner.	3.76	4.00	3.98	3.82	3.68
My command released me from my recall assignment in a timely manner.	3.87	4.02	4.17	3.98	3.77
I was out-processed through PSD in a timely manner.	3.85	4.14	4.16	3.91	3.74
Preparedness	4.33	4.58	4.54	4.45	4.22
I had the professional knowledge/skills to perform my recall assignment.	4.37	4.70	4.52	4.58	4.22
I had the proper general military training to perform my recall assignment.	4.28	4.46	4.55	4.32	4.23
Preparation in the Reserve	3.22	3.32	3.65	3.19	3.18
How well did your training in the Reserve prepare you for:					
your recall assignment in clinical/professional skills training?	3.09	3.35	3.37	3.17	2.98
your recall assignment in operational training?	2.95	3.13	3.39	2.82	2.92
your recall assignment in general military training?	3.65	3.58	4.04	3.60	3.65
your recall assignment in leadership/management training?	3.16	3.12	3.72	3.11	3.13
Command Staffing and Equipment	3.44	3.52	3.67	3.59	3.33
The command to which I was recalled was appropriately staffed.	3.40	3.64	3.67	3.66	3.21
The command to which I was recalled was appropriately equipped.	3.48	3.39	3.68	3.52	3.45
Habitability and Administration	3.44	3.44	3.87	3.47	3.39
Timeliness of Pay -- satisfaction	3.39	3.13	3.92	3.53	3.33
Availability of Uniforms -- satisfaction	3.42	3.62	3.88	3.47	3.32
Adequacy of Messing -- satisfaction	3.52	3.25	3.71	3.37	3.63
Adequacy of Berthing -- satisfaction	3.30	3.33	3.71	3.30	3.27
Transfer of Credentialing/Privileging -- satisfaction	3.65	3.90	4.08	3.74	3.31
Leadership and Assignment	3.61	3.66	3.99	3.69	3.52
My final recall duty station was prepared to receive me when I arrived.	3.30	3.33	3.62	3.42	3.20
My recall assignment was appropriate for my NOBC/NEC.	3.90	4.17	4.28	4.04	3.77
My skills were well utilized during my recall.	3.64	3.60	4.07	3.74	3.56
I was well accepted at the command to which I was recalled.	4.00	4.27	4.41	4.09	3.85
At the command I was recalled to, the leadership was of high caliber.	3.38	3.51	3.87	3.34	3.30
Training Opportunities -- satisfaction	3.22	2.89	3.35	3.35	3.20
Recall Assignment -- satisfaction	3.74	3.88	4.19	3.82	3.65
Overall Recall Experience -- satisfaction	3.68	3.54	4.10	3.77	3.62
Financial and Family Hardship*	2.64	3.25	2.44	2.50	2.59
Civilian Job/Practice -- hardship	2.62	3.75	2.74	2.51	2.41
Financial Problems -- hardship	2.50	3.12	2.24	2.21	2.49
Family/Relationship Separation -- hardship	2.81	2.94	2.55	2.84	2.79
Pay -- dissatisfaction*	2.68	3.25	2.25	2.46	2.69
Community and Family Support	3.83	3.67	3.98	3.88	3.82
Community Support -- satisfaction	4.04	4.12	4.09	4.08	4.00
Family Support -- satisfaction	3.65	3.32	3.84	3.66	3.68
Benefits (medical/dental, etc.) -- satisfaction	3.79	3.55	4.01	3.88	3.78
School Attendance and Dependent Care Hardship	2.88	2.22	2.27	3.01	3.03
School Attendance -- hardship	3.27	1.98	2.12	2.90	3.48
Child/Dependent Care -- hardship	2.51	2.22	2.25	2.96	2.42

* Because hardship and satisfaction are inversely related, pay satisfaction values were reflected prior to analysis to indicate dissatisfaction.

Appendix C
Results of Analysis of Covariance for Each Scale

In-Processing and Out-Processing

Analysis of Variance Summary Table

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance of F
Covariates	25.01	1	25.01	29.21	<.001
Assignment ^a	25.01	1	25.01	29.21	<.001
Main Effects	51.37	3	17.13	20.00	<.001
Corps ^b	51.37	3	17.13	20.00	<.001
Explained	76.38	4	19.10	22.30	<.001
Residual	2329.81	2721	.86		
Total	2406.19	2725	.88		

Multiple Range Test: Scheffe Procedure

Mean	Corps	HM	NC	MC	MSC
3.69	HM				
3.85	NC	*			
4.04	MC	*			
4.10	MSC	*			

Preparedness

Analysis of Variance Summary Table

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance of F
Covariates	.14	1	.14	.21	.65
Assignment ^a	.14	1	.14	.21	.65
Main Effects	55.54	3	18.52	26.97	<.001
Corps ^b	55.54	3	18.52	26.97	<.001
Explained	55.69	4	13.92	20.28	<.001
Residual	1851.17	2697	.69		
Total	1906.86	2701	.71		

Multiple Range Test: Scheffe Procedure

Mean	Corps	HM	NC	MSC	MC
4.24	HM				
4.47	NC	*			
4.55	MSC	*			
4.60	MC	*			

^a CONUS Hospital versus Gulf Fleet Hospital

^b MC versus MSC versus NC versus HM

* Denotes paired comparisons significantly different at the .01 level.

Preparation in the Reserve

Analysis of Variance Summary Table

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance of F
Covariates	3.79	1	3.79	3.22	.07
Assignment ^a	3.79	1	3.79	3.22	.07
Main Effects	32.70	3	10.90	9.26	<.001
Corps ^b	32.70	3	10.90	9.26	<.001
Explained	36.49	4	9.12	7.75	<.001
Residual	3088.13	2624	1.18		
Total	3124.62	2628	1.19		

Multiple Range Test: Scheffe Procedure

Mean	Corps	HM	NC	MC	MSC
3.17	HM				
3.24	NC				
3.32	MC				
4.64	MSC	*	*		

Command Staffing and Equipment

Analysis of Variance Summary Table

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance of F
Covariates	23.69	1	23.69	20.61	<.001
Assignment ^a	23.69	1	23.69	20.61	<.001
Main Effects	29.12	3	9.71	8.45	<.001
Corps ^b	29.12	3	9.71	8.45	<.001
Explained	52.81	4	13.20	11.49	<.001
Residual	3088.12	2687	1.15		
Total	3140.93	2691	1.17		

Multiple Range Test: Scheffe Procedure

Mean	Corps	HM	MC	NC	MSC
3.38	HM				
3.53	MC				
3.57	NC	*			
3.64	MSC				

^a CONUS Hospital versus Gulf Fleet Hospital

^b MC versus MSC versus NC versus HM

* Denotes paired comparisons significantly different at the .01 level.

Habitability and Administration

Analysis of Variance Summary Table

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance of F
Covariates	33.82	1	33.82	38.39	<.001
Assignment ^a	33.82	1	33.82	38.39	<.001
Main Effects	22.48	3	7.49	8.51	<.001
Corps ^b	22.48	3	7.49	8.51	<.001
Explained	56.30	4	14.07	15.98	<.001
Residual	2377.43	2699	.88		
Total	2433.72	2703	.90		

Multiple Range Test: Scheffe Procedure

Mean	Corps	HM	MC	NC	MSC
3.48	HM				
3.51	MC				
3.54	NC				
3.87	MSC	*	*	*	

Leadership and Assignment

Analysis of Variance Summary Table

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance of F
Covariates	9.54	1	9.54	12.34	<.001
Assignment ^a	9.54	1	9.54	12.34	<.001
Main Effects	39.56	3	13.19	17.06	<.001
Corps ^b	39.56	3	13.19	17.06	<.001
Explained	49.10	4	12.28	15.88	<.001
Residual	2103.51	2721	.77		
Total	2152.61	2725	.79		

Multiple Range Test: Scheffe Procedure

Mean	Corps	HM	MC	NC	MSC
3.57	HM				
3.69	MC				
3.72	NC	*			
4.03	MSC	*	*	*	

^a CONUS Hospital versus Gulf Fleet Hospital

^b MC versus MSC versus NC versus HM

* Denotes paired comparisons significantly different at the .01 level.

Financial and Family Hardship

Analysis of Variance Summary Table

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance of F
Covariates	9.48	1	9.48	10.19	.001
Assignment ^a	9.48	1	9.48	10.19	.001
Main Effects	161.01	3	53.67	57.73	<.001
Corps ^b	161.01	3	53.67	57.73	<.001
Explained	170.48	4	42.62	45.85	<.001
Residual	2476.57	2664	.93		
Total	2647.06	2668	.99		

Multiple Range Test: Scheffe Procedure

Mean	Corps	MSC	NC	HM	MC
2.42	MSC				
2.46	NC				
2.53	HM				
3.24	MC	*	*	*	

Community and Family Support

Analysis of Variance Summary Table

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance of F
Covariates	10.88	1	10.88	13.98	<.001
Assignment ^a	10.88	1	10.88	13.98	<.001
Main Effects	16.88	3	5.63	7.23	<.001
Corps ^b	16.88	3	5.63	7.23	<.001
Explained	27.75	4	6.94	8.92	<.001
Residual	2066.61	2656	.78		
Total	2094.36	2660	.79		

Multiple Range Test: Scheffe Procedure

Mean	Corps	MC	HM	NC	MSC
3.68	MC				
3.83	HM				
3.89	NC	*			
4.01	MSC	*			

^a CONUS Hospital versus Gulf Fleet Hospital

^b MC versus MSC versus NC versus HM

* Denotes paired comparisons significantly different at the .01 level.

Appendix D
Scale Means by Corps and Assignment

In-Processing and Out-Processing

		Recall Assignment						
<i>Mean (Count)</i>		CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	<i>Total</i>	
Corps	Medical Corps	4.03 (251)	3.98 (32)	4.03 (18)	4.07 (97)	3.46 (23)	4.00	(421)
	Medical Service Corps	4.10 (131)			4.10 (31)		4.09	(173)
	Nurse Corps	3.83 (551)	3.82 (20)	3.47 (72)	3.94 (166)		3.82	(812)
	Hospital Corps	3.62 (1,224)	3.75 (177)	3.64 (116)	3.97 (275)	3.31 (111)	3.67	(1,903)
Total		3.75 (2,157)	3.80 (238)	3.62 (207)	3.99 (569)	3.35 (138)	3.77	(3,309)

Preparedness

		Recall Assignment						
<i>Mean (Count)</i>		CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	<i>Total</i>	
Corps	Medical Corps	4.66 (251)	4.48 (32)	4.53 (18)	4.43 (96)	4.41 (23)	4.58	(420)
	Medical Service Corps	4.59 (132)			4.39 (31)		4.54	(173)
	Nurse Corps	4.48 (541)	4.36 (18)	4.25 (72)	4.46 (165)		4.45	(799)
	Hospital Corps	4.24 (1,211)	4.24 (176)	4.08 (114)	4.26 (275)	4.05 (111)	4.22	(1,887)
Total		4.37 (2,135)	4.28 (234)	4.18 (205)	4.35 (567)	4.11 (138)	4.34	(3,279)

NOTE: Empty cells denote less than 15 respondents; total figures reflect their inclusion.

Preparation in the Reserve

Recall Assignment

Mean (Count)		CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	Total
Corps	Medical Corps	3.36 (230)	3.31 (30)	3.16 (17)	3.21 (94)	3.35 (20)	3.31 (391)
	Medical Service Corps	3.61 (125)			3.78 (29)		3.63 (165)
	Nurse Corps	3.23 (526)	2.88 (20)	2.74 (69)	3.29 (163)		3.19 (781)
	Hospital Corps	3.14 (1,190)	3.29 (169)	3.03 (112)	3.30 (272)	3.17 (105)	3.17 (1,848)
Total		3.22 (2,071)	3.26 (228)	2.94 (199)	3.31 (558)	3.21 (129)	3.22 (3,185)

Command Staffing and Equipment

Recall Assignment

Mean (Count)		CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	Total
Corps	Medical Corps	3.70 (249)	3.20 (32)	4.06 (18)	3.08 (96)	3.25 (22)	3.51 (417)
	Medical Service Corps	3.79 (132)			3.02 (31)		3.62 (173)
	Nurse Corps	3.64 (538)	3.47 (17)	3.70 (72)	3.34 (164)		3.58 (794)
	Hospital Corps	3.38 (1,207)	2.95 (174)	4.01 (115)	3.35 (275)	2.77 (111)	3.34 (1,882)
Total		3.51 (2,126)	3.03 (231)	3.91 (206)	3.28 (566)	2.84 (137)	3.43 (3,266)

Habitability and Administration

Recall Assignment

<i>Mean (Count)</i>		CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	<i>Total</i>
Corps	Medical Corps	3.59 (250)	3.21 (32)	3.06 (18)	3.30 (96)	3.09 (22)	3.45 (418)
	Medical Service Corps	3.97 (129)			3.46 (31)		3.82 (170)
	Nurse Corps	3.59 (542)	3.17 (19)	2.89 (72)	3.40 (164)		3.47 (800)
	Hospital Corps	3.54 (1,217)	3.12 (176)	3.34 (116)	3.24 (275)	2.69 (111)	3.39 (1,895)
Total		3.58 (2,138)	3.14 (235)	3.16 (207)	3.31 (566)	2.72 (137)	3.44 (3,283)

Leadership and Assignment

Recall Assignment

<i>Mean (Count)</i>		CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	<i>Total</i>
Corps	Medical Corps	3.80 (253)	3.52 (33)	3.69 (18)	3.38 (96)	3.37 (23)	3.65 (423)
	Medical Service Corps	4.11 (132)			3.71 (31)		3.98 (173)
	Nurse Corps	3.77 (549)	3.28 (20)	3.58 (72)	3.55 (166)		3.69 (810)
	Hospital Corps	3.57 (1,224)	3.26 (177)	3.46 (116)	3.56 (275)	3.30 (111)	3.51 (1,903)
Total		3.68 (2,158)	3.29 (238)	3.52 (207)	3.53 (568)	3.29 (138)	3.60 (3,309)

Financial and Family Hardship

Recall Assignment

Mean (Count)		CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	Total
Corps	Medical Corps	3.24 (243)	3.31 (33)	3.25 (18)	3.24 (95)	3.36 (22)	3.25 (411)
	Medical Service Corps	2.39 (128)			2.56 (30)		2.46 (169)
	Nurse Corps	2.44 (535)	2.49 (20)	2.92 (69)	2.54 (164)		2.50 (791)
	Hospital Corps	2.50 (1,202)	2.81 (171)	2.75 (114)	2.65 (272)	2.84 (106)	2.59 (1,865)
Total		2.56 (2,108)	2.86 (233)	2.86 (202)	2.71 (561)	2.95 (132)	2.65 (3,236)

Community and Family Support

Recall Assignment

Mean (Count)		CONUS Hospital	CONUS Marine Support	Gulf Hospital Ship	Gulf Fleet Hospital	Gulf Marine Support	Total
Corps	Medical Corps	3.65 (242)	3.70 (33)	3.73 (18)	3.73 (94)	3.48 (22)	3.67 (409)
	Medical Service Corps	3.99 (128)			4.09 (30)		3.98 (168)
	Nurse Corps	3.84 (532)	3.55 (20)	3.84 (69)	4.07 (164)		3.88 (788)
	Hospital Corps	3.80 (1,199)	3.78 (170)	3.96 (114)	3.97 (272)	3.55 (105)	3.82 (1,860)
Total		3.81 (2,101)	3.74 (231)	3.90 (202)	3.96 (560)	3.53 (131)	3.82 (3,225)

Appendix E
Scale Item Means by Corps and Assignment

Item (Scale)	Assignment	Corps				Overall
		Medical Corps	Medical Service Corps	Nurse Corps	Hospital Corps	
<i>(In-Processing and Out-Processing)</i>						
The in-processing at the Reserve center/PSD/REDCEN was done in a timely manner.	CONUS Hospital	3.92	4.05	3.65	3.47	3.60
	CONUS Marine Support	3.97	--	3.80	3.66	3.71
	Gulf Hospital Ship	3.59	--	3.03	3.10	3.12
	Gulf Fleet Hospital	3.96	3.87	3.67	3.77	3.78
	Gulf Marine Support	3.36	--	--	3.20	3.24
	Overall	3.89	3.99	3.60	3.49	3.60
The in-processing at the Reserve center/PSD/REDCEN was done in a professional manner.	CONUS Hospital	4.02	4.12	3.85	3.68	3.79
	CONUS Marine Support	4.26	--	4.00	3.78	3.85
	Gulf Hospital Ship	3.65	--	3.49	3.40	3.45
	Gulf Fleet Hospital	4.03	4.06	3.85	3.87	3.90
	Gulf Marine Support	3.27	--	--	3.44	3.40
	Overall	3.98	4.07	3.81	3.68	3.77
My command released me from my recall assignment in a timely manner.	CONUS Hospital	3.95	4.15	3.93	3.69	3.81
	CONUS Marine Support	3.77	--	4.00	3.65	3.71
	Gulf Hospital Ship	4.67	--	3.87	4.15	4.10
	Gulf Fleet Hospital	4.15	4.23	4.21	4.09	4.14
	Gulf Marine Support	3.77	--	--	3.48	3.53
	Overall	4.00	4.16	3.98	3.76	3.87
I was out-processed through PSD in a timely manner.	CONUS Hospital	4.16	4.12	3.93	3.66	3.82
	CONUS Marine Support	4.03	--	3.72	3.79	3.83
	Gulf Hospital Ship	4.18	--	3.44	3.95	3.79
	Gulf Fleet Hospital	4.22	4.26	4.06	4.13	4.13
	Gulf Marine Support	3.36	--	--	3.13	3.20
	Overall	4.12	4.15	3.91	3.73	3.84
<i>(Preparedness)</i>						
I had the professional knowledge /skills to perform my recall assignment.	CONUS Hospital	4.76	4.57	4.57	4.23	4.40
	CONUS Marine Support	4.66	--	4.56	4.22	4.30
	Gulf Hospital Ship	4.83	--	4.50	4.19	4.36
	Gulf Fleet Hospital	4.57	4.45	4.66	4.21	4.42
	Gulf Marine Support	4.61	--	--	4.10	4.20
	Overall	4.70	4.53	4.58	4.22	4.38
I had the proper general military training to perform my recall assignment.	CONUS Hospital	4.59	4.60	4.39	4.26	4.35
	CONUS Marine Support	4.31	--	4.17	4.25	4.26
	Gulf Hospital Ship	4.22	--	3.97	4.00	4.01
	Gulf Fleet Hospital	4.28	4.31	4.28	4.31	4.30
	Gulf Marine Support	4.20	--	--	3.99	4.00
	Overall	4.46	4.54	4.32	4.23	4.30

NOTE: Dashed entries had less than ten respondents. Dashed lines demarcate groupings of items by scale.

Item (Scale)	Assignment	Corps				Overall
		Medical Corps	Medical Service Corps	Nurse Corps	Hospital Corps	
<i>(Preparation in the Reserves)</i>						
How well did your training in the Reserve prepare you for your recall assignment in clinical/professional skills training?	CONUS Hospital	3.46	3.39	3.25	2.98	3.12
	CONUS Marine Support	3.21	--	2.89	3.11	3.09
	Gulf Hospital Ship	3.24	--	2.64	2.80	2.78
	Gulf Fleet Hospital	3.18	3.38	3.12	2.96	3.07
	Gulf Marine Support	3.37	--	--	3.02	3.09
	Overall	3.36	3.36	3.16	2.98	3.09
How well did your training in the Reserve prepare you for your recall assignment in operational training?	CONUS Hospital	3.05	3.22	2.76	2.75	2.81
	CONUS Marine Support	3.31	--	2.84	3.23	3.21
	Gulf Hospital Ship	3.12	--	2.13	2.74	2.57
	Gulf Fleet Hospital	3.13	4.00	3.25	3.32	3.30
	Gulf Marine Support	3.55	--	--	3.26	3.31
	Overall	3.12	3.38	2.81	2.91	2.94
How well did your training in the Reserve prepare you for your recall assignment in general military training?	CONUS Hospital	3.59	4.03	3.61	3.67	3.67
	CONUS Marine Support	3.59	--	3.25	3.65	3.62
	Gulf Hospital Ship	3.47	--	3.36	3.56	3.49
	Gulf Fleet Hospital	3.51	4.00	3.66	3.71	3.68
	Gulf Marine Support	3.60	--	--	3.45	3.47
	Overall	3.56	4.03	3.59	3.65	3.65
How well did your training in the Reserve prepare you for your recall assignment in leadership/management training?	CONUS Hospital	3.19	3.69	3.16	3.14	3.18
	CONUS Marine Support	3.03	--	2.55	3.20	3.12
	Gulf Hospital Ship	2.82	--	2.82	2.98	2.91
	Gulf Fleet Hospital	2.98	3.72	3.10	3.22	3.17
	Gulf Marine Support	2.89	--	--	2.94	2.94
	Overall	3.09	3.68	3.10	3.13	3.15
<i>(Command Staffing and Equipment)</i>						
The command to which I was recalled was appropriately staffed.	CONUS Hospital	3.63	3.66	3.63	3.09	3.32
	CONUS Marine Support	3.13	--	3.53	2.91	3.00
	Gulf Hospital Ship	4.39	--	3.86	4.06	4.02
	Gulf Fleet Hospital	3.71	3.58	3.65	3.70	3.68
	Gulf Marine Support	3.50	--	--	3.02	3.08
	Overall	3.63	3.64	3.64	3.21	3.40
The command to which I was recalled was appropriately equipped.	CONUS Hospital	3.77	3.93	3.67	3.69	3.71
	CONUS Marine Support	3.28	--	3.41	2.98	3.05
	Gulf Hospital Ship	3.72	--	3.54	3.97	3.80
	Gulf Fleet Hospital	2.44	2.43	3.04	3.00	2.89
	Gulf Marine Support	3.00	--	--	2.55	2.61
	Overall	3.38	3.60	3.52	3.47	3.48

Item (Scale)	Assignment	Corps				Overall
		Medical Corps	Medical Service Corps	Nurse Corps	Hospital Corps	
<i>(Habitability and Administration)</i>						
Timeliness of Pay – satisfaction	CONUS Hospital	3.16	4.03	3.68	3.54	3.56
	CONUS Marine Support	2.88	--	3.42	2.77	2.83
	Gulf Hospital Ship	2.06	--	2.35	2.93	2.65
	Gulf Fleet Hospital	3.44	3.74	3.65	3.34	3.47
	Gulf Marine Support	2.45	--	--	2.25	2.25
	Overall	3.12	3.88	3.54	3.33	3.38
Availability of Uniforms – satisfaction	CONUS Hospital	3.97	4.05	3.65	3.50	3.63
	CONUS Marine Support	3.28	--	3.33	3.51	3.49
	Gulf Hospital Ship	2.41	--	2.58	2.88	2.73
	Gulf Fleet Hospital	3.12	3.17	3.32	2.85	3.05
	Gulf Marine Support	3.24	--	--	2.63	2.68
	Overall	3.61	3.87	3.47	3.32	3.42
Adequacy of Messing – satisfaction	CONUS Hospital	3.35	3.71	3.38	3.75	3.62
	CONUS Marine Support	3.13	--	2.88	3.30	3.25
	Gulf Hospital Ship	3.88	--	3.76	4.16	4.00
	Gulf Fleet Hospital	2.96	3.32	3.23	3.32	3.24
	Gulf Marine Support	3.55	--	--	3.09	3.12
	Overall	3.27	3.60	3.37	3.63	3.52
Adequacy of Berthing – satisfaction	CONUS Hospital	3.50	3.75	3.41	3.33	3.39
	CONUS Marine Support	2.90	--	2.53	2.87	2.83
	Gulf Hospital Ship	3.06	--	2.69	3.42	3.14
	Gulf Fleet Hospital	3.20	3.45	3.37	3.46	3.39
	Gulf Marine Support	3.19	--	--	2.75	2.79
	Overall	3.34	3.61	3.29	3.28	3.30
Transfer of Credentialing/ Privileging – satisfaction	CONUS Hospital	4.04	4.08	3.86	3.46	3.79
	CONUS Marine Support	3.71	--	--	3.05	3.41
	Gulf Hospital Ship	3.93	--	3.38	2.96	3.35
	Gulf Fleet Hospital	3.80	3.77	3.47	2.82	3.53
	Gulf Marine Support	3.36	--	--	3.11	3.21
	Overall	3.93	4.06	3.75	3.29	3.67
<i>(Leadership and Assignment)</i>						
My final recall duty station was prepared to receive me when I arrived.	CONUS Hospital	3.51	3.74	3.64	3.30	3.44
	CONUS Marine Support	3.25	--	2.71	2.85	2.87
	Gulf Hospital Ship	3.28	--	2.63	3.07	2.94
	Gulf Fleet Hospital	2.86	3.07	3.14	3.31	3.17
	Gulf Marine Support	2.96	--	--	2.55	2.59
	Overall	3.30	3.54	3.42	3.20	3.28
My recall assignment was appropriate for my NOBC/NEC.	CONUS Hospital	4.22	4.40	4.01	3.76	3.92
	CONUS Marine Support	3.53	--	3.22	3.49	3.45
	Gulf Hospital Ship	4.50	--	3.97	3.81	3.93
	Gulf Fleet Hospital	4.42	4.39	4.26	3.96	4.15
	Gulf Marine Support	3.22	--	--	4.04	3.90
	Overall	4.17	4.32	4.04	3.78	3.92

Item (Scale)	Assignment	Corps				Overall
		Medical Corps	Medical Service Corps	Nurse Corps	Hospital Corps	
(Leadership... continued)						
My skills were well utilized during my recall.	CONUS Hospital	3.76	4.16	3.85	3.65	3.75
	CONUS Marine Support	3.32	--	3.41	3.30	3.31
	Gulf Hospital Ship	2.94	--	3.41	2.96	3.11
	Gulf Fleet Hospital	3.37	4.06	3.55	3.59	3.57
	Gulf Marine Support	3.82	--	--	3.64	3.64
	Overall	3.61	4.10	3.73	3.57	3.64
I was well accepted at the command to which I was recalled.	CONUS Hospital	4.38	4.49	4.18	3.84	4.03
	CONUS Marine Support	4.41	--	3.77	3.63	3.74
	Gulf Hospital Ship	4.06	--	3.50	3.54	3.58
	Gulf Fleet Hospital	4.02	4.13	4.09	4.18	4.12
	Gulf Marine Support	4.00	--	--	3.60	3.64
	Overall	4.26	4.38	4.08	3.84	3.98
At the command I was recalled to, the leadership was of high caliber.	CONUS Hospital	4.00	4.16	3.67	3.46	3.62
	CONUS Marine Support	3.91	--	3.76	3.24	3.37
	Gulf Hospital Ship	3.89	--	3.68	3.70	3.71
	Gulf Fleet Hospital	2.03	2.50	2.06	2.53	2.31
	Gulf Marine Support	3.45	--	--	3.08	3.10
	Overall	3.50	3.82	3.33	3.30	3.36
Training Opportunities -- satisfaction	CONUS Hospital	2.95	3.48	3.32	3.25	3.24
	CONUS Marine Support	2.75	--	3.05	3.05	3.01
	Gulf Hospital Ship	3.11	--	3.67	3.30	3.40
	Gulf Fleet Hospital	2.79	3.13	3.40	3.32	3.25
	Gulf Marine Support	2.45	--	--	2.68	2.61
	Overall	2.88	3.39	3.35	3.21	3.21
Recall Assignment -- satisfaction	CONUS Hospital	3.91	4.24	3.77	3.66	3.75
	CONUS Marine Support	3.64	--	3.20	3.25	3.28
	Gulf Hospital Ship	3.94	--	3.94	3.66	3.78
	Gulf Fleet Hospital	3.88	4.33	4.01	3.85	3.93
	Gulf Marine Support	3.91	--	--	3.60	3.62
	Overall	3.88	4.19	3.81	3.64	3.74
Overall Recall Experience -- satisfaction	CONUS Hospital	3.53	4.17	3.78	3.66	3.71
	CONUS Marine Support	3.39	--	3.05	3.34	3.31
	Gulf Hospital Ship	3.78	--	3.74	3.64	3.69
	Gulf Fleet Hospital	3.63	4.07	3.83	3.75	3.77
	Gulf Marine Support	3.27	--	--	3.16	3.17
	Overall	3.54	4.09	3.76	3.61	3.67

Item (Scale)	Assignment	Corps				Overall
		Medical Corps	Medical Service Corps	Nurse Corps	Hospital Corps	
<i>(Financial and Family Hardship)</i>						
Civilian Job/Practice -- hardship	CONUS Hospital	3.81	2.83	2.62	2.45	2.69
	CONUS Marine Support	3.84	--	2.50	2.51	2.74
	Gulf Hospital Ship	3.17	--	2.45	2.26	2.42
	Gulf Fleet Hospital	3.69	2.40	2.17	2.25	2.50
	Gulf Marine Support	3.52	--	--	2.36	2.59
	Overall	3.74	2.77	2.51	2.41	2.64
Financial Problems -- hardship	CONUS Hospital	3.07	2.17	2.11	2.40	2.39
	CONUS Marine Support	3.22	--	2.15	2.69	2.71
	Gulf Hospital Ship	3.00	--	2.65	2.66	2.69
	Gulf Fleet Hospital	3.13	2.57	2.35	2.61	2.62
	Gulf Marine Support	3.36	--	--	2.73	2.88
	Overall	3.11	2.28	2.21	2.49	2.49
Family/Relationship Separation -- hardship	CONUS Hospital	2.85	2.42	2.75	2.72	2.72
	CONUS Marine Support	3.09	--	2.80	2.82	2.86
	Gulf Hospital Ship	2.94	--	3.17	2.94	3.02
	Gulf Fleet Hospital	3.10	2.87	3.05	3.03	3.04
	Gulf Marine Support	3.14	--	--	2.82	2.88
	Overall	2.95	2.54	2.85	2.79	2.81
Pay -- dissatisfaction <i>[Because hardship and satisfaction are inversely related, pay satisfaction values were reflected prior to analysis to indicate dissatisfaction.]</i>	CONUS Hospital	3.28	2.15	2.33	2.51	2.53
	CONUS Marine Support	3.09	--	2.50	3.16	3.09
	Gulf Hospital Ship	3.89	--	3.39	3.10	3.27
	Gulf Fleet Hospital	3.13	2.40	2.53	2.69	2.70
	Gulf Marine Support	3.41	--	--	3.38	3.41
	Overall	3.26	2.26	2.47	2.68	2.68

<i>(Community and Family Support)</i>						
Community Support -- satisfaction	CONUS Hospital	3.99	4.02	3.91	3.84	3.88
	CONUS Marine Support	3.88	--	3.50	4.13	4.01
	Gulf Hospital Ship	4.44	--	4.53	4.41	4.45
	Gulf Fleet Hospital	4.41	4.53	4.54	4.33	4.42
	Gulf Marine Support	4.41	--	--	4.28	4.32
	Overall	4.12	4.08	4.09	4.00	4.04
Family Support -- satisfaction	CONUS Hospital	3.34	3.83	3.61	3.63	3.60
	CONUS Marine Support	3.25	--	3.45	3.69	3.62
	Gulf Hospital Ship	3.24	--	3.65	3.90	3.76
	Gulf Fleet Hospital	3.33	4.00	3.83	3.92	3.80
	Gulf Marine Support	3.23	--	--	3.42	3.37
	Overall	3.32	3.85	3.65	3.68	3.64
Benefits (medical/dental, etc.) -- satisfaction	CONUS Hospital	3.63	4.13	3.96	3.93	3.92
	CONUS Marine Support	3.84	--	3.68	3.53	3.57
	Gulf Hospital Ship	3.56	--	3.43	3.58	3.53
	Gulf Fleet Hospital	3.44	3.73	3.83	3.68	3.68
	Gulf Marine Support	2.82	--	--	2.96	2.92
	Overall	3.55	4.00	3.88	3.78	3.79

Item (Scale)	Assignment	Corps				Overall
		Medical Corps	Medical Service Corps	Nurse Corps	Hospital Corps	
(School Attendance and Dependent Care Hardship)						
School Attendance -- hardship	CONUS Hospital	1.79	1.68	3.00	3.47	3.26
	CONUS Marine Support	--	--	--	3.68	3.56
	Gulf Hospital Ship	--	--	2.81	3.75	3.49
	Gulf Fleet Hospital	--	--	2.69	3.42	3.13
	Gulf Marine Support	--	--	--	3.47	3.49
	Overall	1.98	2.03	2.91	3.50	3.29
Child/Dependent Care -- hardship	CONUS Hospital	2.08	2.20	3.07	2.44	2.53
	CONUS Marine Support	2.74	--	2.85	2.16	2.36
	Gulf Hospital Ship	2.00	--	2.49	2.44	2.39
	Gulf Fleet Hospital	2.45	2.42	2.87	2.68	2.67
	Gulf Marine Support	2.13	--	--	2.35	2.35
	Overall	2.21	2.28	2.97	2.44	2.53

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE October 1992	3. REPORT TYPE AND DATE COVERED Final 1991-1992		
4. TITLE AND SUBTITLE Perceptions of U.S. Navy Medical Reservists Recalled For Operation Desert Storm		5. FUNDING NUMBERS Program Element: 6515N Work Unit Number: M0106.001 -6001		
6. AUTHOR(S) D. Stephen Nice, Susan M. Hilton		8. PERFORMING ORGANIZATION Report No. 92-35 92-35		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Health Research Center P. O. Box 85122 San Diego, CA 92186-5122		10. SPONSORING/MONITORING AGENCY REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Naval Medical Research and Development Command National Naval Medical Center Building 1, Tower 2 Bethesda, MD 20889		11. SUPPLEMENTARY NOTES		
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.		12b. DISTRIBUTION CODE		
13. ABSTRACT (Maximum 200 words) The recall of reserve forces in support of Operations Desert Shield/Storm resulted in the activation of approximately 9,700 Navy medical reservists. The purpose of this study was to identify major issues associated with the recall and assignment experiences. A demographically representative sample of 3,804 medical reservists (39%) responded to a survey between June and September, 1991. Results indicated that in-processing and out-processing were conducted in a timely and professional manner. Reservists felt well prepared to meet the challenges of their recall assignments; however, they did not strongly endorse the Reserve training program. As a general trend across operationally-oriented issues, such as command staffing and equipment, habitability and administration, and leadership and assignment satisfaction, responses were moderately positive. Reservists assigned to CONUS hospitals rated items more positively than those assigned to Marine support, and officers were more positive than Hospital Corpsmen. The greatest financial hardships were experienced by Medical and Dental Corps officers. Child care/dependent care requirements of most reservists with children appeared to be reasonably well met. Results are presented as a descriptive heuristic for policy considerations.				
14. SUBJECT TERMS Naval Medicine, Reservists, Navy Medical Personnel, Recall		15. NUMBER OF PAGES 36		
		16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited	